149 US 266

RECORD, CASE No. 13,793.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1892.

TERM No., 199.

THE RICHMOND AND DANVILLE RAILROAD COMPANY, PLAINTIFF IN ERROR,

vs.

HENRY ELLIOTT.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF GEORGIA.

FILED OCTOBER 17, 1889.

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1 *Record.*

Superior Court of Fulton County, Georgia.

HENRY ELLIOT
vs.
THE RICHMOND & DANVILLE RAILROAD CO.

Action for personal injuries.

Be it remembered that on the twenty-sixth day of September, 1887, there was filed in the clerk's office of the United States circuit court in and for the northern district of Georgia the record in above-stated case, removed from the superior court of Fulton county, Georgia, in words and figures following, to wit:

Declaration.

HENRY ELLIOT
vs.
THE RICHMOND & DANVILLE RAILROAD CO.

GEORGIA,
Fulton County.

To the superior court of said county:

The petition of Henry Elliott shows that the Richmond and Danville Railroad Company, a corporation chartered by the laws of the State of Virginia and controlling the Atlanta and Charlotte Air Line Railway Company, a corporation chartered by the laws of Georgia, the said defendant having its office in said county and State, has injured and damaged your petitioner twenty thousand dollars, for that heretofore, to wit, in said county, on the night of November the 25th, 1886, your petitioner, while in the discharge of his duties as head yard coupler in the service of the Central Railroad and Banking Company and while at his post of duty, in Atlanta, was stricken by a piece of engine boiler or dome which was
2 blown from an engine, to wit, No. 515, in the possession and control of the defendant and its servants and employees, which was caused by the explosion of the said engine on account of the carelessness and negligence of the defendant's agents and servants. Said engine was improperly and negligently managed by defendant's agents and servants, in that more steam was allowed to generate than the engine had capacity to contain; that said engine was defective and the defendant had notice of the defect. Said defect consisted in the dome of said engine being improperly and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode, which fact was known to the defendant and its agents and servants. Petitioner further says that on account of its large size and construction said engine was not suited to the road on which defendant used it, to wit, from Atlanta, Georgia, to Charlotte, N. C., and it required great care and diligence on the part of

the defendant's agents to adjust the same so as to prevent accidents, which care and diligence the defendant failed to give. Your petitioner further shows that said engine was improperly constructed in other respects, to wit it was not properly riveted and fastened—that is to say, the dome castings to the dome proper—and there was a flaw in the dome casting near where it was riveted to the dome proper. Said dome casting was of infirm material, unskillfully made and unfit for the use intended. Said defect was known to the defendant, or ought to have been known. Petitioner shows that at the time of said explosion, which was caused by the negligence and carelessness of the defendant's agents and servants and without any fault on his part, he was standing about fifteen or twenty yards from said engine, to wit, in said county, and from the blow received by the flying parts of the same his right thigh was crushed and mangled to such an extent as to require amputation of said leg just below the hip joint.

Petitioner shows that on account of said injury, besides other bruises and injuries, he has suffered great bodily pain and
3 anguish and will continue to suffer pain during the balance part of his life on account of said injuries so inflicted by defendant. He says his injuries are permanent and have entirely destroyed his capacity to labor and earn money; that at the time of his injuries he was twenty-seven years of age, strong and healthy and able to labor and earn and did earn fifty dollars per month, with a good prospect of being able to earn one hundred dollars per month in the near future but for the injuries inflicted by the defendant as aforesaid. Petitioner says that he has expended and will expend in and about being treated for said injuries one thousand dollars for doctors' bills and the sum of five hundred dollars for medicine and nursing, and all on the account of the negligence of defendant's agents and servants as aforesaid. Wherefore he brings suit and prays process may issue requiring the defendant to be and appear at the next superior court in and for said county on the first Monday in March next, then and there to answer your petitioner's suit for damages.

GARTRELL & LADSON,
T. P. WESTMORELAND,
Pl'ff's Att'ys.

Filed in office Feb'y 8th, 1887.

C. H. STRONG, *C. S. C.*

Process.

GEORGIA, }
Fulton County. }

HENRY ELLIOTT
versus
RICHMOND & DANVILLE R. R. Co. } Complaint.

To the sheriff of said county, Greeting:

The defendant is hereby required personally or by attorney to be and appear at the superior court, to be held in and for said county,

on the first Monday in March next, then and there to answer the plaintiff's complaint, as in default thereof said court will pro-
4 ceed as to justice shall appertain.

Witness the Honorable Marshall J. Clarke, judge of said court, this 8th day of February, 1887.

C. H. STRONG, *Clerk.*

Served the Richmond and Danville Railroad Company by serving E. Berkeley, as superintendent, personally with a copy of the within.

Feb'y 10th, 1887.

C. C. GREENE,
Dep'ty Sheriff.

Petition for Removal.

In the Superior Court of Fulton County, State of Georgia.

HENRY ELLIOTT, Plaintiff, *vs.* THE RICHMOND & DANVILLE RAILROAD CO., Defendant.	Petition for Removal to the Circuit Court of the United States, Northern District of Georgia.

To the honorable the superior court of Fulton county, State of Georgia:

Your petitioner, The Richmond and Danville Railroad Company, represents to this honorable court that the matter and amount in dispute in the above-entitled case exceeds the sum of two thousand dollars, exclusive of interest and costs.

That the controversy in sais suit is between citizens of different States, and that petitioner was at the time of the commencement of said suit and still is a corporation duly incorporated and chartered under the laws of the State of Virginia, and that the said Henry Elliot was then and still is a citizen of the State of Georgia; that the said case was filed in the office of the clerk of the superior court of Fulton county on Feb'y 8th, 1887, and was made returnable to the March term, 1887, of the superior court of said county,
5 which convened on the first Monday in said month; that under the laws of the State of Georgia the defendant to the said case, to wit, your petitioner, is required to answer or plead to the declaration or complaint therein filed on or before the last day of said term of court; that term of court is still in session, not having yet adjourned, and the time within which your petitioner is required by the laws of sais State to answer or plead to the declaration or complaint has not yet expired.

And your petitioner offers herewith good and sufficient surety for its entering in said circuit court of the United States, on the first day of its next session, a copy of the record in this suit and for paying all costs that may be awarded by said circuit court if the said court shall hold that this suit was wrongfully or improperly removed thereto. Your petitioner prays this honorable court to proceed no further herein, except to make the order of removal required by law and to accept said surety and bond and to cause the record

therein to be removed into said circuit court of the United States in and for the said northern district of Georgia; and your petitioner will ever pray.

POPE BARROW,
GEO. DUDLEY THOMAS,
HENRY JACKSON,
Att'ys for Pet'rs.

STATE OF GEORGIA,
County of Fulton.

I, Henry Jackson, being duly sworn, do say that I am the attorney for the petitioner in the above-entitled cause, and that I have read the foregoing petition and know the contents thereof and the statements and allegations therein are true, as I verily believe.

HENRY JACKSON.

Subscribed by the said Henry Jackson in my presence and
6 by him sworn to before me this 12th day of May, 1887.

D. B. DE SAUSSURE,
N. P., F. Co., Ga.

Bond.

Know all men by these presents that The Richmond and Danville Railroad Company, as principal, and R. H. Richards, as sure*ties*, are held and firmly bound unto Henry Elliott in the penal sum of five hundred dollars; for the payment whereof, well and truly to be made unto the said Henry Elliott, his successors, representatives, and assigns, we bind ourselves, our heirs, representatives, and assigns, jointly and severally, firmly by these presents—

Yet upon these conditions: The said The Richmond and Danville Railroad Co. having petitioned the superior court of Fulton county, State of Georgia, for the removal of a certain cause therein pending, wherein Henry Elliott, as aforesaid, is plaintiff and The Richmond and Danville Railroad Company is defendant, to the circuit court of the United States in and for the northern district of Georgia:

Now, if the said The Richmond and Danville Railroad Company, your petitioner, shall enter in the said circuit court of the United States on the first day of its next session a copy of the record in said suit and shall well and truly pay all costs that may be awarded by said circuit court of the United States if said court shall hold that said suit was wrongfully or improperly removed thereto, then this obligation to be void; otherwise in full force and virtue.

Witness our hands and seals this twelfth day of May, A. D. 1887.

THE RICHMOND AND DANVILLE RAILROAD CO., [L. S.]
By HENRY JACKSON, [L. S.]
Its Attorney-at-Law for the Defense of the Case Above Stated.
R. H. RICHARDS. [L. S.]

Attest: D. B. DE SAUSSURE,
N. P., F. Co., Ga.

7 STATE OF GEORGIA, } ss:
County of Fulton, }

I, R. H. Richards, of said county, the surety named in the foregoing bond, being duly sworn, do depose and say that I am a resident of the State of Georgia and a property-holder therein; that I am worth the sum of five hundred dollars over and above all my debts and liabilities and exclusive of property by law exempt from execution; that I have property in the State of Georgia liable to execution of the value of more than five hundred dollars.

R. H. RICHARDS.

Subscribed in my presence by R. H. Richards and by him sworn to before me this 12th day of May, A. D. 1887.

D. B. DE SAUSSURE,
N. P., F. Co., Ga.

Order for Removal.

Upon considering the petition and bond filed in this case, it is ordered that the bond be accepted and approved, and that the court proceed no further. It is further ordered that the clerk of this court prepare a complete transcript of the record and furnish it to counsel for the Richmond and Danville Railroad Company upon the payment of the costs of said transcript.

This May 12th, 1887.

MARSHALL J. CLARKE,
Judge S. C., A. C.

Clerk's Certificate.

CLERK'S OFFICE, SUPERIOR COURT OF FULTON CO.,
ATLANTA, GA., *Sept.* 21, 1887.

I hereby certify that the foregoing pages hereunto attached contain a true and complete transcript of the record in the case of Henry Elliot, plaintiff, *vs.* The Richmond and Danville Railroad Company, defendant, all of which appears from the record and minutes of said court.

8 Witness my signature and the seal of said court, affixed the day and year first above written.

[L. S.]

C. H. STRONG,
Clerk Superior Court.

Filed in office this 26th day of September, 1887.

A. E. BUCK, *Clerk.*

Amendment to Declaration.

HENRY ELLIOTT }
vs.
THE RICHMOND AND DANVILLE R. R. CO. }

Plaintiff, by leave of the court, amends his complaint and for matter of amendment says that the explosion of said engine of said defendant was caused by the defective condition of the injector or

pump, it failing to pump sufficient water into the boiler, which caused the boiler to become hot and generate an excessive and dangerous quantity of steam.

Plaintiff further says that the safety or "pop" valve of said engine was defective and out of order, it from said defects failing, as it should, to allow the excess of steam to escape from said boiler, all of which defects were known or should have been known to defendant.

GARTRELL & LADSON,
T. P. WESTMORELAND,
Pl'ff's Att'ys.

Filed in clerk's office 29 day of October, 1888.
A. E. BUCK, *Clerk,*
By O. C. FULLER, *Dep. Clerk.*

9 UNITED STATES OF AMERICA, *Northern District of Georgia.*

In the Circuit Court of the United States for the Northern District of Georgia.

To Henry N. Massey, Thomas D. Finletter:

Whereas there is a certain matter in controversy now pending and to be tried in the said circuit court between Henry Elliott, plaintiff, and The Richmond and Danville Railroad Company, defendant;

And whereas Davis H. Hansell, William Shinn, Augustus Wolf, William Gibbs, James Brown, Jr., James Heenan, and Charles S. Phillips are material witnesses in said suit on behalf of the defendant, and cannot attend said circuit court in person without manifest inconvenience:

Now know ye that, reposing special trust and confidence in your prudence and fidelity, you are hereby appointed, and you or any two or more of you are hereby authorized and required to cause the said Davis H. Hansell, William Shinn, Augustus Wolf, William Gibbs, James Brown, Jr., James Heenan, and Charles S. Phillips personally to come before you, and, after being duly sworn, to examine them concerning the said suit agreeably to the interrogatories hereunto attached; and the answers to the same being plainly and distinctly written, you are to send the same, together with this writ, closed up under your hands and seals, to the clerk of said court, at Atlanta, Ga., on or before the first Monday in December, 1887.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, this 12 day of November, 1887.

[L. S.] A. E. BUCK, *Clerk.*

Instructions to Guide in Taking Testimony.

First. Fill the blank in the commission with the names of the persons officiating as commissioners. (Two may act. Less than two will not suffice.)

Second. Take a separate sheet of paper, state the case precisely as

it is at the head of the interrogatories. Then write the following formula:

STATE OF ——, }
County of ——. }

By virtue of a commission issuing out of the honorable circuit court of the United States for the northern district of Georgia, to us directed, we have caused (insert the name of witness or witnesses) the witness in said commission named to come before us, and, being duly sworn true answers to make to the interrogatories to said commission annexed, deposes and answers as follows:

To the first interrogatory he answers (and so with the rest of the answers). When all are answered, let the witness subscribe them. Then the commissioners will observe the following form at the end of the answers:

Answered, sworn to, and subscribed before us this — day of ——, 18—.

—— ——, [L. S.]
Commissioner.
—— ——, [L. S.]
Commissioner.

Then annex the answers to the interrogatories with a wafer, seal all up in one packet, put as many seals on the envelope as there are commissioners, let each commissioner write his name across the seal, adding the word "commissioner." Direct the package: To the clerk of the U. S. circuit court for the northern district of Georgia, Atlanta, Ga. If the packet is to be sent by mail, let the postmaster certify as follows: "Received this packet from —— ——, Esq., one of the commissioners." "—— ——, postmaster at ——."

State the case on the outside of the envelope just as it is in the caption of the interrogatories; also name of witnesses examined.

10 In the Circuit Court of the United States for the Northern District of Georgia.

HENRY ELLIOTT
vs.
THE RICHMOND AND DANVILLE RAILROAD COMPANY. } Case.

Original interrogatories to be propounded to Davis H. Hansell, William Shinn, Augustus Wolf, William Gibbs, James Brown, Jr., James Heenan, and Charles S. Phillips, who are material witnesses for the defendant and who reside out of the county of Fulton and in the city of Philadelphia, State of Pennsylvania.

Let each witness answer separately.

Int. 1st. Are you acquainted with the parties to the above suit?

Int. 2nd. In what business were you engaged in June, 1886, and where at? In whose employ were you then working, and in what

capacity? If engaged in foundry or machine work, state what experience you have had therein, how long have you been engaged in such work, and all the various capacities in which you have labored.

Int. 3rd. If working for Baldwin locomotive works in June, 1886, state what connection you had with the construction of an engine or any part thereof known to said Baldwin locomotive works as engine 10-34-E 513, and subsequently known to the defendant as engine number 515.

Int. 4th. Where was the dome ring for such engine cast? What connection did you have with the making of such casting? What examination was made of such casting, if any, before it left that department of work to which you were attached?

Int. 5th. Please state what connection has the dome ring with the boiler of a locomotive engine. For what purpose is it used and how is it constructed?

Int. 6th. Please look upon the annexed diagram and state whether it gives correctly the construction and the materials from which constructed of the upper portion of the boiler to a locomotive engine. What material comes immediately next to the
11 water or steam within the upper portion of the boiler and below the dome ring? If a steel plate one-half inch thick comes next thereto, what is the next material to such steel plate? If wood from three-quarters of an inch to an inch thick, what material comes next to such wood? What connection has the sheet-iron jacket with such boiler?

Int. 7th. Explain fully how the dome ring is fitted and fastened to the top of the boiler. Of what material is the dome ring constructed, and how thick? What space is there between the dome ring and the dome casing? How thick is the dome casing and of what material is it constructed?

Int. 8th. Explain fully, by reference to the annexed diagram, how the various metals and wood forming a part of the boiler are fastened together and how the dome ring is fastened to them. If the dome ring is riveted in, explain fully and particularly the length of such rivets, how they are fastened in, how clamped, and how the work is finished to give it strength. How far apart are the rivets fastening the dome ring to the top of the boiler?

Int. 9th. If you remember the particular engine to which allusion is heretofore made, state fully and particularly whether the boiler thereto, including the dome ring, was constructed in the manner described by you. In June, 1886, what personal attention did you give to the construction of the dome ring to the engine above alluded to?. What personal attention did you give to the construction of the dome rings of all engines made by the Baldwin locomotive works? How could you discover whether the casting of the dome ring of the engine above alluded to was defective or not? How could you discover whether the casting of the dome ring of
12 any engine made in June, 1886, was defective or not?

Int. 10th. If the dome ring of the engine alluded to or of any engine constructed by said company about June, 1886, was defectively cast, how could such defect be discovered? If a defect

was discovered in the casting, what was done to remedy it? Was such defective casting used?

Int. 11th. State fully the whole system under which the Baldwin locomotive works constructed boilers of engines and engines themselves and what precautions were taken to prevent defective work going out for use. What other precautions were possible? In what way could a defect in the casting have been discovered other than in the methods taken?

Int. 12th. After the dome ring is riveted to the boiler and the dome casing placed thereover, what wood-work is built thereon? When the engine is completed and delivered to the railroad company for use, how can a defect in the casting of the dome ring at and about the point where the rivets are fastened in, attaching it to the top of the boiler, be discovered? What precautions can be taken by the railroad company to discover a defect in the casting at that point? Is it true or not that the dome ring is entirely covered so that its condition is not visible to the eye? State what obstacles would intercept the view of the dome ring at the point where it is riveted to the top of the boiler when the engine is completed and ready for use by the railroad company.

Int. 13th. At what point in the construction of the boiler or dome ring is it necessary that the defects in the casting should be discovered and remedied? After the engine is fully completed and delivered for use, in what way could a defect in the casting of the dome ring be discovered? What precautions would it be pos-
13 sible for the railroad company using such engine to take to discover defect- in the casting of the dome ring?

Int. 14th. How was the engine known to the Baldwin locomotive works as 10-34-E 513 and to defendant as number 515, five hundred and fifteen, constructed as to its boiler and dome ring? Describe its condition fully and minutely when delivered by the Baldwin locomotive works to the defendant.

Int. 15th. What work did you personally do or supervise in connection with the construction of the boiler and dome ring of the engine above referred to. What work did you personally do or supervise in connection with the construction of the boilers and dome rings of all engines made by the Baldwin locomotive works about June, 1886? Answer fully and minutely.

Int. 16th. After the boiler was completed and the dome ring riveted thereon, what test was made of the soundness of the work. What pressure was placed thereon?

Int. 17th. Please examine the upper portion of the dome ring now in possession of the Baldwin locomotive works and explain how with such a defect in the casting it would have passed the pressure test. If you state that it resulted from a defect in the casting of the dome ring, explain what such defect was. State fully and minutely how such defect manifests itself. State fully and distinctly how such defect could have been discovered by the officers or agents of the defendant after such engine was delivered to them for use in operating the railroad.

Int. 18th. Please examine carefully the annexed diagram and

state whether it — a correct representation of the upper portion of the boiler and the dome and of a dome ring of a locomotive engine. Is it a correct diagram of those portions of the engine known to the Baldwin locomotive works as engine 10-34-8 513, and to de-
15 fendant as number 515? If not, state in what particular it is incorrect.

(Here follows diagram marked p. 14.)

Int. 19th. State fully and particularly all facts within your knowledge tending to show why the defendant railroad company could not have discovered the defect in the casting of the dome ring as if specially thereunto interrogated.

G. DUDLEY THOMAS,
HENRY JACKSON,
POPE BARROW,
Defendant's Attorneys.

Cross-Interrogatories.

In the Circuit Court of the United States for the Northern District of Georgia.

HENRY ELLIOTT
vs.
THE RICHMOND & DANVILLE RAILROAD COMPANY. } Case.

Cross-interrogatories to be propounded to David H. Hansell, William Shinn, Augustus Wolf, William Gibbs, James Brown, Jr., James Heenan, and Charles S. Phillips, witnesses for defendant, who reside out of the county of Fulton and in the city of Philadelphia Pennsylvania.

Let each witness answer separately.

Cross-int. 1st. In whose employ are you now working?

Int. 2nd. State who, if anybody, is present at the taking of these interrogatories besides yourself and commissioners.

Int. 3rd. State about what number of engine boilers and dome rings you assisted in the construction of for the Baldwin locomotive works during the month of June, 1886. State what, if anything, specially called the dome ring in question to your attention during the casting thereof, or in the further work of riveting it to the dome proper. If your attention was not called specially to the dome ring in question—that is, in a more marked degree than to other rings construced during the period above-mentioned—state how it is possible for you to single out the dome ring in question and specify any particular work or thing done thereupon or in con-
16 nection therewith.

Int. 4th. Is there not as much pressure, while an engine is steamed up, on the dome ring as on other parts of the boiler? Is not the pressure the same and should there not be the same care given to the construction of the dome ring as to the other parts of the boiler?

Int. 5th. Examine the upper portion of the dome ring, now in the possession of the Baldwin locomotive works, and answer, was there not forty-six rivet holes around the lower portion of the dome ring where the same was fastened to the dome proper, and is the distance between all the rivet holes the same. Does it not appear that the casting wholly failed to congeal or unite at and around twenty-eight or twenty-nine of said rivet holes and only partially united at & around six or seven of the remainder of the rivet holes, leaving a space of the casting sound for the space only as embraced in seven or eight of said rivet holes?

Int. 6th. Does not said flaw or place where the casting failed to unite exist on the outside portion of said dome ring at or about the center of all the thirty-five or thirty-six rivet holes referred to in 5th interrogatory, and was not said rivet holes drilled through said flaw? Does not also exist in said dome ring, at and about where the casting failed to unite, numbers of defects, commonly known as "blow-holes" or "honey-comb," and is not the casting on that account alone defective?

Int. 7th. Was not said flaw or failure of the casting to unite, or flaw, and said "blow-holes" or "honey-comb" made in the pouring of the casting in the making of said dome ring?

Int. 8th. Was there not discernable to the eye upon a careful examination a "cold-shot line" around said dome ring where said casting wholly failed to unite at and about said rivet holes; if not, why not?

Int. 9th. Could not the machinist who turned, on the lath or boring mill, the bottom part of said dome ring, where the
17 rivet holes are made, have discovered, upon a careful inspection, said defects or flaws; if not, why not?

Int. 10th. Could not the machinist who drilled said thirty-five or thirty-six rivet holes, which passed through said flaw or a portion of said dome ring where the casting wholly and partially failed to unite, have discovered said flaws upon a careful inspection; if not, why not?

Int. 11th. Could not the machinist who riveted the dome proper and dome ring together upon a careful examination have discovered said flaw on account of a slight separation of the disunited parts of the dome ring caused by the driving of the rivets?

Int. 12th. Was not said dome ring, on account of the defects and flaws which existed therein, radically unsound and defective, and was not the same unfit for the use intended?

Int. 13th. After said dome ring was made and before the same was riveted to the dome proper, could not said flaws have been discovered by a competent boiler inspector by carefully sounding said dome ring?

Int. 14th. Could not said defect or flaw in said dome ring, caused by the failure of the casting to unite, have been discovered on the inner surface of said dome ring, by detecting the "cold-shot line," by a competent inspector before the dome ring was fastened to the dome proper; if not, why not?

Int. 15th. Was not the dome cap of the engine in question easily

removable, also the throttle valve and valve seat, after the engine was delivered to the said defendant railroad company for use, and could not a careful inspector, upon removing the same, with the aid of a lantern or torch, have seen the inner surface of said dome ring at and around the place where said flaw or defect in said dome ring existed?

GARTRELL & LADSON,
T. P. WESTMORELAND,
Pl'ff's Att'ys.

18 *Answers to Interrogatories.*

U. S. C. C., N. D. Georgia.

HENRY ELLIOT
vs.
THE RICHMOND AND DANVILLE RAILROAD COMPANY.

STATE OF PENNSYLVANIA,
County of Philadelphia.

By virtue of a commission issuing out of the honorable circuit court of the United States for the northern district of Georgia, to us directed, we have caused Davis H. Hansell, William Shinn, Augustus Wolf, William Gibbs, James Brown, Jr., James Heenan, and Charles S. Phillips, the witnesses in said commission named, to come before us, and, being duley sworn true answers to make to the interrogatories to said commission annexed, depose and answers as follows:

DAVIS H. HANSELL, being duly sworn:

To the first interrogatory he answers: No, sir.

To the second interrogatory he answers: In the iron-foundry business at the Baldwin locomotive works, Philadelphia, as foreman of the foundry. I have been foreman of their iron foundry eleven years. I have been engaged in such work for tweenty years. During that time I have been moulder and foreman.

To the third interrogatory he answers: I was foreman of foundry and oversaw all the castings for that engine. I recollect the engine spoken of. I mean by castings, all iron castings.

To the fourth interrogatory he answers: The dome ring was cast in the iron foundry of the Baldwin locomotive works. I had the hiring of the men, and the iron for the work was provided for them by me from the company's stock. Castings are made and delivered to the cleaning department of the foundry. We examine all
19 the castings of our department, and if any defects are in them the castings are laid aside. I do not recollect particularly examining this casting, but it must have been examined before it left my department.

To the fifth interrogatory he answers: That is not in my department. I simply make the casting, and them I am through with it.

To the sixth interrogatory he answers: That is not in my depart-

ment. B on the plan is the dome ring. A is the dome cap. F is the dome casing. All these are made of cast iron. I cannot make any answer to the rest of the interrogatory.

To the seventh interrogatory he answers: I do not do this work. The dome ring is made of cast iron two inches thick. I do not know the space between the dome ring and the dome casing. The dome casing is made of cast iron, between five-eighths (⅝) and three-quarters (¾) of an inch in thickness.

To the eighth interrogatory he answers: I cannot answer. I only attend to the castings.

To the ninth interrogatory he answers: I remember the particular engine spoken of. The dome ring was of cast iron, of the thickness given above—two inches thick. I gave the dome ring in question a general supervision, as I do all others. I oversee the casting personally of all cast-iron castings belonging to the Baldwin works. I do not see every piece of casting. I examine every piece of defective work personally. There is no possible way of detecting the flaw in the casting. If the slightest crack is seen the casting is thrown away. We would discover whether the nome ring is defective or not by looking for cracks in the casting. The rule of the works is that if a defect is discovered by any man working on a piece at any stage of the work the piece is thrown out. I would discover whether there was any defect in the casting of any dome ring made in 1886 in the manner above described.

20 To the tenth interrogatory he answers: I have answered that in my ninth interrogatory. If a defect was discovered in any piece the casting is thrown aside and remelted. We do not attempt to remedy any defect. No such defective casting, to our knowledge, ever went out of the foundry.

To the eleventh interrogatory he answers: In reference to the casting, there is no other way possible to detect defects than those used by us and above mentione-. To the rest of the interrogatory I cannot reply.

To the twelfth interrogatory he answers: The dome ring is covered by the dome casing, so that its condition is not visible to the eye. The dome casing intercepts a view of the dome ring where it is riveted to the top of the boiler.

To the thirteenth interrogatory he answers: If I discover any defects while a casting is in my possession I throw it away. If a defect is afterwards discovered by any one through whose hands it passes the casting is thrown away. After the engine is completed to discover a defect in the casting of a dome ring would be impossible, if the defect is not apparent. I don't know of any means a railroad company could take to discover such defects than those taken by us. We take every possible precaution to have the castings perfect and to detect flaws therein.

To the fourteenth interrogatory he answers: The dome ring of engine 513 was constructed as above set forth. I cannot describe the condition of the engine.

To the fifteenth interrogatory he answers: I supervised the cast-

ing of this dome ring and all other dome rings and castings made by the Baldwin locomotive works in June, 1886.

To the sixteenth interrogatory he answers: I cannot say.

21 To the seventeenth interrogatory he answers: I have examined the casting mentioned and cannot say how it passed the pressure test. The union of the metal in the casting does not seem to be perfect, although there was no defect in the surface. I cannot explain how it stood the pressure test. The only way to have discovered a defect of this kind would be to have broken up the iron. It is evident there was a def-ct in the casting. The metal did not unite in the interior of the casting. The railroad could only have discovered this defect by breaking up the piece—that is, destroying the piece.

To the eighteenth interrogatory he answers: I have examined the plan. It is a correct representation of the dome, dome ring, and casing. It is a correct diagram of engine No. 513.

To the nineteenth interrogatory he answers: I could not have found such a defect, and I do not see how the railroad company could have detected it. It is such a defect that no one could discover it without breaking open the piece—*i. e.*, the dome ring.

To the first cross-interrogatory he answers: The Baldwin locomotive works.

To the second cross-interrogatory he answers: There are present, besides myself and the commissioners, Mr. Shinn and Mr. Wolfe.

To the third cross-interrogatory he answers: In the month of June, 1886, I superintended the casting of about forty dome rings. There was nothing to call my attention specially to this particular dome ring. There were no particular points to call my attention to this particular dome ring, and I do not recollect any particular dome ring in the casting.

To the fourth cross-interrogatory he answers: Yes, sir.

To the fifth cross-interrogatory he answers; There were forty-six rivet holes around the dome ring where it was fastened to the dome; cannot speak of the distance between the holes. The iron failed to congeal around *around* about two-thirds of the rivet holes,

22 and partially united at and around a few others. The casting was only sound in about seven or eight rivet holes.

To the sixth cross-interrogatory he answers: Yes; these rivet holes were drilled through the center of where it failed to unite. There was no blow-holes that I saw. There is a drossy substance at the bowl of the casting. The existence of the drossy sudstance in the bowl had nothing to do with the break and the existence of the drossy substance does not make the dome ring defective.

To the seventh cross-interrogatory he answers: The flaw or failure of the casting to unite was made in the casting of the dome ring. There were no blow-holes or honey-comb at all. The spongey substance or dross was also caused in the casting.

To the eighth cross-interrogatory he answers: There was no such cold-shot line visible while the dome ring was in my possession.

To the ninth cross-interrogatory he answers: I cannot say.

To the tenth cross-interrogatory he answers: I cannot say.

To the eleventh cross-interrogatory he answers: I cannot say.

To the twelfth cross-interrogatory he answers: If it could have been discovered the dome ring should have been rejected, but the defect could not be discovered.

To the thirteenth cross-interrogatory he answers: I never made such an examination and I cannot say.

To the fourteenth cross-interrogatory he answers: The cold-shot line did not appear or show in the surface while it was in my possession. If it had appeared that would have shown a defect and we would have thrown it out.

To the fifteenth cross-interrogatory he answers: The dome cap is easily removable, and an inspector could see the inside of the dome ring in the removal of the dome cap, and if the cold-shot line was there and was on the surface and visible it could be seen on such an examination, but a cold-shot line below the surface of the metal could not be discovered except by destroying the substance.

23

DAVIS H. HANSELL.

Answered, sworn to, and subscribed before us this 28 day of November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

WILLIAM SHINN, being duly sworn, to the first interrogatory he says:

1st. No, sir.

To the second interrogatory he answers: I was engaged at Baldwin's iron works in June, 1886. I was working for David Hansell in foundry or cast-iron works. I am engaged in moulding cast-iron work, and have been for about fourteen years, in capacity as a moulder.

To the third interrogatory he answers: I cannot account for the engine. I worked on all the domes that went out of the works at that time. I made the castings at the rate of four or five a day.

To the fourth interrogatory he answers: In Baldwin's iron works I made the castings of all domes at that time and must have made the casting of this. I do not recollect this particular dome in the casting. My examination consisted in my examining it by my sight and pounding it all over with a bar weighing about eighty pounds. A perfect dome has a regular ring, and this dome must have sounded properly or it would have been thrown out, and all domes that do not sound right are thrown aside by Mr. Hansell, the foreman, or the casting inspector. They are discovered at once and chucked out.

To the fifth interrogatory he answers: Dome ring is made out of cast iron two inches thick, in the shape shown by the plan annexed to the interrogatories. The rest of interrogatory I cannot answer.

To the sixth interrogatory he answers: I have examined plan and it gives a correct idea of the construction and materials
24 of the upper part of a boiler. The rest of interrogatory is out of my line. I am a moulder.

To the seventh interrogatory he answers: The dome ring is made of cast-iron two inches thick; the dome casing is cast-iron about ⅝ to ¾ of an inch thick. I cannot answer the rest of the interrogatory.

To the eighth interrogatory he answers: That is not in my line.

To the ninth interrogatory he answers: I do not remember this particular engine, but I suppose that the dome ring on this engine was cast by *my*, because I cast all dome rings made by the Baldwin works during May, 1886, which was the time the casting for this engine was made. This dome ring was made in the manner described by me. I made the mould and got the iron and cast the dome ring for this engine and cast the rate of four more out of the same ladle of iron. The castings for this engine were made in May, not June, 1886. I did the same as above mentioned with all dome rings. I could discover whether the casting of this dome ring was defective by sight and pounding and punching them all over. I could discover the defects of the dome ring made in June, 1886, in the same manner.

To the tenth interrogatory he answers: The defect of a casting could be discovered as I have said, and if defect was discovered no attempt was made to remedy it; it was thrown aside and melted up.

To the eleventh interrogatory he answers: The castings were examined by me and by two hands besides me before it left my department; no other precautions could be taken to discover a defect.

To the twelfth interrogatory he answers: That is not in my line. I simply casted the dome rings.

To the thirteenth interrogatory he answers: Any defect that is in the surface can be discovered at any stage of the work by any one who desires to make inspection.

To the fourteenth interrogatory he answers: The dome
25 ring was cast same as all others, and no defects were found in it, or it would be thrown —.

To the fifteenth interrogatory he answers: I made the castings of the dome rings of all engines made by Baldwin's up to May 27, 1886.

To the sixteenth interrogatory he answers: I do not know anything about it.

To the seventeenth interrogatory he answers: It had a good hold in certain parts, and where it was defective there is a shell of iron about ⅛ inch thick, the head on the outside ring about thick as an egg-shell; it also helped to hold it. It was a flaw made by a bubble of gas which got into the casting. This defect may happen on the surface or it may happen through the body of the iron; if it is on the inside of iron it cannot be detected until it is torn up in pieces. The railroad people would have had to broken it up. There was no open cavity left in the body of the iron, but the particles of iron united on the outside and then the weight of the metal run over the top and

squeezed the gas out and the iron came together, but failed to unite. I never saw anything like this casting.

To the eighteenth interrogatory he answers: The dome ring is a correct representation of this and of all others.

To the nineteenth interrogatory he answers: The defect was in the interior of iron, and it could not be discovered unless the iron was broken up.

To the first cross-interrogatory he answers: Samuel J. Cresswell; Philadelphia.

To the second cross-interrogatory he answers: No one.

To the third cross-interrogatory he answers: In June, 1886; none in May; four or five a day. Nothing called my attention to this special dome degree. I cannot specify this dome ring.

To the fourth cross-interrogatory he answers: This — all
26 out of my line.

To the — cross-interrogatory he answers: I examined this dome ring; there are large number of rivet holes; about $\frac{2}{3}$ of the rivet holes were bored through where the iron failed to congeal or unite. Some of the rivet holes are through solid iron.

To the sixth cross-interrogatory he answers: The iron united on the outside, but not in the body of the iron at the point where the rivet holes were bored, and the rivet holes were bored through this flaw. I do not see a blow-hole or honey-comb in this casting.

To the seventh cross-interrogatory he answers: The flaw may have been in the molten iron or it may happen in the pouring out of the iron or casting of it.

To the eighth cross-interrogatory he answers: When the casting was turned out I saw no cold-shot line; had I seen it I would have thrown it out. I see no cold-shot line now; the defect in this casting is due to the failure of the iron to unite.

To the ninth cross-interrogatory he answers: That is out of my line.

To the tenth cross-interrogatory he answers: That is out of my line.

To the eleventh cross-interrogatory he answers: That is outside of my line.

To the twelfth cross-interrogatory he answers: The dome ring was unsound or it would never have exploded.

To the thirteenth — interrogatory he answers: I do not know; I do not think he could, because I sounded it myself, and it must have been all right or it could not have left the shop.

To the fourteenth — interrogatory he answers: I saw the inside surface of this dome ring before it left my possession, and I did not see a cold-shot line because I would have thrown it out. I don't see how any inspector could have seen a cold-shot line if I did not.

27 To the fifteenth — interrogatory he answers: This is out of my line of business.

WILLIAM SHINN.

Answered, sworn to, and subscribed before us this 28 day of November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

WILLIAM GIBBS sworn:

To the first interrogatory he answers: No, sir.

To the second interrogatory he answers: I am a machinist in the Baldwin locomotive works, in the employ of said works. I have been a machinist since 1867; I have always been and still am a machinist.

To the third interrogatory he answers: I worked for the Baldwin works in June, 1886; I had the getting out of all dome rings, rocker shafts, eccentries, sand-box works, stack works, and other small jobs. I worked on this engine No. 513; I supervised the work but did not actually do the work myself. I had charge of the gang of six or seven men who did the turning or lathe work of all dome rings at that time. This particular dome ring must have been under my charge.

To the fourth interrogatory he answers: I suppose the dome ring was cast in the foundry of the Baldwin works. I had no connection with said casting. The dome ring is delivered to me in its rough state, as it comes from the casting. I turn the top surface of the dome ring on a lathe, then I turn off the part where it fits into the shell of the dome—the part just below the letter "B" in the plan where the rivet is marked as going through. I do not recollect this casting in particular, but we always watch carefully for flaws or defects; if they are discovered the casting or piece is rejected. In my department I do not pound it or ring it, but we examine it as
28 it is turned by sight. I suppose this dome ring was subjected to this examination; a man is present watchin- the piece when it is being turned.

To the fifth interrogatory he answers: I am a machinist and cannot speak particularly to this.

To the sixth interrogatory he answers: The plan looks correct. I do not put the machine together.

To the seventh interrogatory he answers: The part I take in fitting the ring to the casing is to turn off the surface on a lathe as described above. The dome ring is made of cast-iron about one and a half inches, I think—maybe two inches.

To the eighth interrogatory he answers: I do nothing but turn off the surface of the dome ring.

To the ninth interrogatory he answers: I do not remember this particular engine and dome ring. I suppose the turning was done as I have described, as they are all done that way. I could discover any defect while turning off the surface by looking at it.

To the tenth interrogatory he answers: By the process stated. If a defect is discovered in the casting nothing is done to remedy it.

It is thrown away. No defective casting was knowingly used by us.

To the eleventh interrogatory he answers: We all inspect our work. It passes through several hands, all of whom look for defects. A defect might show at any stage of the work. I know of no other way of finding defects than by looking for them and pounding or ringing the metal.

To the twelfth interrogatory he answers: I do not know what other precautions a railroad company could take than those we take.

To the thirteenth interrogatory he answers: Defects can be discovered at any stage of the work.

To the fourteenth interrogatory he answers: I suppose the dome ring was made as I have told. The dome ring must have
29 looked perfect when it passes out of my hands or I would not have passed it.

To the fifteenth interrogatory he answers: I supervised personally the turning off of the dome ring of all the dome rings turned in 1886.

To the sixteenth interrogatory he answers: I do not know.

To the seventeenth interrogatory he answers: I have examined the dome ring and cannot say how it passed our tests. The defect was in the casting of the dome ring. It occurred because the iron was only partly congealed. The metal did not unite. It united on the outside surface of the dome ring, presenting a solid surface to the view. Since it has been broken I can see that inside of the body of the metal there is a defect. The defect presents the appearance of two surfaces which have come together and failed to unite. I do not think the defect could have been discovered while in my hands. I think it would be impossible for me to see the defect. I do not know any other way of discovering the defect.

To the eighteenth interrogatory he answers: The dome ring looks correct on the diagram.

To the nineteenth interrogatory he answers: I do not see how they could have discovered it if we did not in turning it. After examining it now I do not see how I could have discovered it then. The iron shows such sharp edges that it — nearly impossible to see it. The crack is so fine as to be almost impossible to see it. If we had seen any trace of a crack we would have dug into it with a chisel to see how far it extended.

To the first cross-interrogatory he answers: Baldwin locomotive works.

To the second cross-interrogatory he answers: Mr. Brown, Mr. Heenan, and Mr. Phillips.

To the third cross-interrogatory he answers: During June
30 I assisted in getting out 10 or 12 a week. Nothing called this dome ring specially to my attention.

To the fourth cross-interrogatory he answers: I cannot answer.

To the fifth cross-interrogatory he answers: I have examined the dome ring. There are rivet holes, some of which go through the flaw, which was on the line where most of the rivet holes were.

To the sixth cross-interrogatory he answers: The flaw is where the rivet holes are. This flaw can now be seen in the surface of the dome ring. The explosion has forced it apart, so that it is now visible. There are no blow-holes or honey-combs in the metal near the crack or any place in the dome ring.

To the seventh cross-interrogatory he answers: I do not know. In my opinion, the defect must have happened in the casting.

To the eighth cross-interrogatory he answers: We could not have seen any cold-shot line or we would have thrown it out.

To the ninth cross-interrogatory he answers: I or any other machinist could not have discovered this defect. We were looking at it while it was being turned, as we always do.

To the tenth cross-interrogatory he answers: I do not drill the holes.

To the eleventh cross-interrogatory he answers: I cannot say.

To the twelfth cross-interrogatory he answers: It shows that it was unfit, but we could not then discover it.

To the thirteenth cross-interrogatory he answers: I do not know.

To the fourteenth cross-interrogatory he answers: I do not think it could. The inner surface appears to be solid; the outside scale appears solid.

To the fifteenth cross-interrogatory he answers: That is not in my department.

WILLIAM GIBBS.

Answered, sworn to, and subscribed before us this 29 day of November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

31 JAMES BROWN, JR., sworn:

To the first interrogatory he answers: No.

To the second interrogatory he answers: In June, 1886, I was in the emply of Baldwin locomotive works as a latheman or machinist. I have been working as a machinist for over 13 years. I have always been engaged on a lathe.

To the third interrogatory he answers: I was the only man who worked on dome rings in June, 1886. If the dome ring was made at that time I must have worked.

To the fourth interrogatory he answers: While the piece was being turned I stood alongside of it, and if a defect was discovered I reported it to Mr. Gibbs, and the piece would be thrown away.

To the fifth interrogatory he answers: The dome ring is about two inches thick. It is made of cast iron.

To the sixth interrogatory he answers: The diagram looks very much like the upper portion of an engine.

To the seventh interrogatory he answers: The dome ring is of cast iron two inches thick.

To the eighth interrogatory he answers: I do not do any of this work.

To the ninth interrogatory he answers: As I made or turned all dome rings at that time, I must have turned this dome ring. I did the turning and turned off about one-half inch. If we saw anything on the surface we would follow it up with a chisel and would ring it with a hammer to discover a defect.

To the tenth interrogatory he answers: Any defect would be discovered, as I have said. If a defect is discovered nothing is done to remedy it, and it is thrown away.

To the eleventh interrogatory he answers: The work was
32 examined at all stages. I cannot think of any precautions which could be taken other than we take to discover a defect in the casting.

To the twelfth interrogatory he answers: I cannot think of any other way of discovering a defect other than that I have said.

To the thirteenth interrogatory he answers: I cannot say. I know of no other way except to ring it or see it. I don't see how the railroad company could take any other precautions than we take.

To the fourteenth interrogatory he answers: The dome ring of this engine was made as the plan shows and as I have told.

To the fifteenth interrogatory he answers: I turned the dome ring personally, as I turned personally all dome rings made in the works in June, 1886.

To the sixteenth interrogatory he answers: I cannot answer this; I am a machinist.

To the seventh- interrogatory he answers: I have examined this dome ring; I saw the way it was broke; there was nothing to show the defect in the surface when I turned it off; if there had been the slightest defect I would have reported it. I do not know how the company could have discovered it if we could not.

To the eighteenth interrogatory he answers: It looks like all dome rings.

To the nineteenth interrogatory he answers: I could not say the defect did not show on the outside.

To the first cross-interrogatory he answers: I work for the Baldwin locomotive works.

To the second — interrogatory he answers: No one except Mr. Gibbs, Mr. Heenan, and Mr. Phillips.

To the third cross-interrogatory he answers: About 10 or 12 a week I turned out of dome rings. Nothing special called this dome ring to my attention.

33 To the fourth cross-interrogatory he answers: I cannot answer.

To the fifth cross-interrogatory he answers: Some of the rivet holes go through the flaw.

To the sixth cross-interrogatory he answers: I cannot say; I cannot see any blow-holes or honey-comb.

To the seventh cross-interrogatory he answers: I cannot say.

To the eighth cross-interrogatory he answers: I am not a caster and do not know what a cold-shot line is.

To the ninth cross-interrogatory he answers: I made a careful examination of this dome ring while it was being made, and I do not think any machinist could have discovered the defects. I examined it carefully as I turned it, and I did not detect it.

To the tenth cross-interrogatory he answers: I cannot answer as to the riveting.

To the eleventh cross-interrogatory he answers: I cannot say.

To the twelfth cross-interrogatory: It would have been defective and unfit for use if we could have discovered the defect.

To the thirteenth cross-interrogatory he answers: I cannot say.

To the fourteenth — interrogatory he answers: I cannot answer.

To the fifteenth — interrogatory he answers: I do not know; I am a machinist or latheman, and only attend to the turning of dome rings and other articles on the lathe. I examine the work as it is turned, and if defective it is rejected.

JAMES BROWN.

Answered, sworn to, and subscribed before us this 29th day of November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

34 JAMES HEENAN sworn:

To the first interrogatory he answers: No, sir.

To the second interrogatory he answers: I was employed in the boiler-shop department of the Baldwin locomotive works in June, 1886, as a boiler-maker. I have been engaged in charge of boiler-riveting machines for 18 years. I have always worked at boiler-work as a riveter. I also worked at dome casting.

To the third interrogatory he answers: I did the riveting of the dome sheels, waste, fire doors and boxes.

To the fourth interrogatory he answers: I examined it before and after I riveted it by looking over it. I took a lamp and looked and went inside and examined it carefully. I did not pound it.

To the fifth interrogatory he answers: I do not know.

To the sixth interrogatory he answers: The plan is correct.

To the seventh interrogatory he answers: By rivets. A dome ring is cast iron an inch and a half thick. Dome casing is half inch thick, of steel or iron.

To the eighth interrogatory he answers: Rivets are four inches long, seven-eighths thick. They are fastened on with a head on the inside by hydraulic pressure. Rivets are two — an eighth inches apart where the dome ring is fastened to the boiler.

To the ninth interrogatory he answers: I do not recollect the particular engine, but they were all alike; work is all the same. I riveted all dome rings and examined all, as I have said. I could

discover it by seeing with my naked eye. If a defect is exposable I could discover it.

To the tenth interrogatory he answers: They could not be discovered unless they were visible or by pressure test or by pounding. We condemned castings in which defects were found. Defective castings were never used.

35 To the eleventh interrogatory he answers: We are told to inspect the work. Each man is told to examine for defects. I do not know of any other precautions possible.

To the twelfth interrogatory he answers: If it is closely examined at the points where the rivets are driven in fastening the dome ring to the boiler, if a defect is there it could be seen; if it cannot be seen it is impossible to discover it. A. R. R. Co. cannot, that I can see, do more than we do.

To the thirteenth interrogatory he answers: Defects should be discovered in the foundry or at any time afterwards. We all examine it; do not know how it could be discovered after the engine is completed.

To the fourteenth interrogatory he answers: By riveting, as all others are. I examine the rivets in the boiler shop after the water pressure (by plug pressure) is on it. When it left my hands it must have been all right.

To the fifteenth interrogatory he answers: I did the riveting of the dome casting to the boiler and examined the dome ring inside and out. The inside I examined with a lamp. If there had been I would have condemned it. I did this to all boilers and dome rings.

To the sixteenth interrogatory he answers: The water pressure, which, however, I do not do.

To the seventeenth interrogatory he answers: I have seen this dome ring; can't say how it passed the pressure test. The defect came from some cause unknown to me. The defect ran around the head of the dome. There was an opening where the metal failed to unite. This could not have been there (that is, on the surface) while in my hands. We could not see the defect, and I do not see how the railroad company could.

To the eighteenth interrogatory he answers: It is a correct diagram of an engine—of engine 513.

36 To the nineteenth interrogatory he answers: Because it could not be seen; it passed all our tests.

To the first cross-interrogatory he answers: Baldwin locomotive works.

To the second cross-interrogatory he answers: No one.

To the third cross-interrogatory he answers: About twelve a week. Nothing called this dome ring especially to my attention, and I do not particularly recollect it.

To the fourth cross-interrogatory he answers: I think so.

To the fifth cross-interrogatory he answers: There were about forty-six rivets about the place where the dome ring is fastened to the dome proper. The spaces between vary by about one-eighth of an inch. The space is two and an eighth inches. The casting failed

to unite at or about twenty-eight of these rivet holes—that is, the rivet holes appear to pass through a flaw now, but I do not believe they passed through a flaw when the holes were made. I have charge of riveting the holes, not of drilling them.

To the sixth cross-interrogatory he answers: The flaw is above the rivet holes and runs toward the dome cap. There are no blow-holes or honey-combs; as there are none, the casting is not therefore defective.

To the seventh cross-interrogatory he answers: I do not know.

To the eighth cross-interrogatory he answers: I could not see any cold-shot line because it was not there to be seen. The flaw was inside—that is, beneath the surface.

To the ninth cross-interrogatory he answers: He could not do it because he did not go that far. It was not visible to him.

To the tenth cross-interrogatory he answers: He might drill holes through a hollow defect and then his drill would catch or drop, and then he would detect the flaw. If there is no vacancy in the mass of iron, I do not think you can detect it in drilling.

To the eleventh cross-interrogatory he answers: He could if
37 it was there. I drove the rivets; I did not see defect; I examined my work as I did it.

To the twelfth cross-interrogatory he answers: It was not unsound, in my opinion, when it passed my hands.

To the thirteenth cross-interrogatory he answers: I do not believe it could.

To the fourteenth cross-interrogatory he answers: I do not believe it could. I saw no cold-shot line inside the dome ring nor anything else to indicate defects.

To the fifteenth — interrogatory he answers: I do not believe he could, with the aid of the lantern, have seen a defect in the inside of a dome ring. He could see the inside of a dome ring if the cap was taken off.

JAMES HEENAN.

Answered, sworn to, and subscribed, this 29th day of November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

CHARLES S. PHILLIPS sworn:

To the first interrogatory he answers: No.

To the second interrogatory he answers: I am a machinist in Baldwin's locomotive works for last eleven years. I have during that time run a planer, shaping machine, general bench-work, general erecting, had charge of stationary engines and boilers, and am now assistant foreman of erecting works at Baldwin's.

To the third interrogatory he answers: I superintended putting the engine together in its running gear, and also applied the press-

ure test to the boiler. This is one of several engines made for — same company. I do not recollect this particular engine. I worked on it; it is charged to me on the books.

38 To the fourth interrogatory he answers: The casting and boiler were examined by me at one hundred and eighty pounds water pressure, and it was followed by a steam pressure of one-thirty pounds.

To the fifth interrogatory he answers: It is to make a finish to the top of the dome. It is constructed as shown by the plan, made of cast iron about 2 inches thick.

To the sixth interrogatory he answers: The plan is correct—one-half inch steel, then three-quarters wood, then $\frac{1}{8}$-in. sheet-iron jacket.

To the seventh interrogatory he answers: It is turned and fitted closely and then riveted. The dome ring is cast iron, 2 inches thick; about inch and one-half space between dome ring and dome cover; no space at all between dome ring and dome casing. The dome casing is about $\frac{1}{8}$ of an inch thick; it is sheet iron. The casing is marked E on plan, the cover is marked F on plan.

To the eighth interrogatory he answers: The dome ring, marked B, is fastened to sheet C by 48 rivets $\frac{7}{8}$ inch in diameter, $2\frac{1}{8}$ pitch or space between the rivets. The wood jacket D is fastened by sheet-iron bands to C. E, slipped, is over the whole thing, and A is the dome cap. It is studded on with a copper joint to B, 10 studs $\frac{7}{8}$ inch in diameter. F is the dome cover, made of cast iron, fitted to the dome cap A and dome casing E. F is to make a finish and to hold in the heat. The dome-ring rivets are fastened in by hydraulic pressure and are not clamped; there is a head on it; the rivet is shown on plan.

To the ninth interrogatory he answers: I recollect this engine as one of 10 or 12 we made for the company, and it is charged to me on the books and is made in the way I have described. My duty was to test dome rings, not to construct. I tested them by escaping water under pressure of 180 pounds or steam under 130 pounds.

39 Under our system of detecting flaws by leaks it would be impossible to discover this flaw, located where it is. The only way to discover it was to have the thing blow up.

To the tenth interrogatory he answers: In the turning or drilling or water pressure where the defect is above the caulking—that is, above letter B on plan. If a defect in a casting is discovered it is condemned at once and no attempt is made to remedy it.

To the eleventh interrogatory he answers: The work is divided up and done by specialists in that branch; each man does part, and it is his duty to take care and watch out for defects in that work. There could not be any precautions taken which we do not take.

To the twelfth interrogatory he answers: No wood-work is built thereon. It could not be discovered. The railroad company could take no precautions, because it is covered from view by three casings, two of iron and one of wood. The dome ring is entirely covered from view.

To the thirteenth interrogatory he answers: It should be discovered at any point, but after it was delivered it could not be discovered,

only by a bad leak. I don't think the railroad company could take any precautions to detect a flaw in casting.

To the fourteenth interrogatory he answers: In our usual way, as described above. The condition when delivered was A one, and it was built as the plan shows.

To the fifteenth interrogatory he answers: I saw the boiler was tight and in good condition, as I did all boilers at that time under my charge.

To the sixteenth interrogatory he answers: We put on two pressures, as I have stated above.

To the seventeenth interrogatory he answers: It passed the pressure test because the defect was below the line B of the caulking. The defect was caused by a failure of the metal to unite. It showed itself when the 2 surfaces of metal came together in the mass
40 of metal and failed to unite. I do not see how the railroad company could discover the defect by any test.

To the eighteenth interrogatory he answers: It is a correct plan of an engine locomotive and of engine No. 513.

To the nineteenth interrogatory he answers: I don't see how they could. It is covered up by casing. It is in the inside of the metal.

To the first cross-interrogatory he answers: In Baldwin's locomotive works.

To the second cross-interrogatory he answers: No one.

To the third cross-interrogatory he answers: I tested about ten dome rings and boilers in June, 1886, as I have above stated. I do not recollect this engine particularly.

To the fourth cross-interrogatory he answers: Yes; the pressure is same and same precaution is required.

To the fifth cross-interrogatory he answers: I counted 48 rivet holes. The distance, 2¼, between is the same. The casting failed to unite at 28 of them and only partially united at 6 or 7 and wholly united around but 7 or 8.

To the sixth cross-interrogatory he answers: The flaw does not exist on the outside of dome ring, but the rivet holes are drilled through the flaw. I see no blow-holes or honey-comb.

To the seventh cross-interrogatory he answers: I know the flaw happened in the casting.

To the eighth cross-interrogatory he answers: There was not, because it was not there.

To the ninth cross-interrogatory he answers: I do not think he could, because the flaw was in the interior, and if he could he would have detected it.

41 To the tenth cross-interrogatory he answers: I think that as the metal was so compact it could not be discovered by the drilling.

To the eleventh cross-interrogatory he answers: If the rivets had driven it apart it would have been discovered; but the rivets did not drive it apart or it would have been discovered.

To the twelfth cross-interrogatory he answers: It was unfit and if it had been discovered it would never have gone out of the shop.

To the thirteenth cross-interrogatory he answers: I do not think it could.

To the fourteenth cross-interrogatory he answers: There was no cold-shot line there to detect. If it had been there it could be detected.

To the fifteenth cross-interrogatory he answers: The dome cap, throttle val-e, and valve seat could easily be removed by the railroad company. An inspector could have seen the inner surface of the dome ring at and around the place where the flaw —, but he could not have seen the flaw, as it was in the interior of the metal.

CHAS. S. PHILLIPS.

Answered, sworn to, and subscribed before us this 29th November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

AUGUSTUS WOLFE sworn:

To the first interrogatory he answers: No, sir.

To the second interrogatory he answers: I was employed as cleaner and inspector of all iron castings. I have been engaged in this work fourteen years, for Baldwin all the time. The first two years I had charge of patterns. Since then I've always been a cleaner and inspector.

To the third interrogatory he answers: I must have cleaned this dome ring and inspected it.

42 To the fourth interrogatory he answers: It was cast in Baldwin's. I had nothing to do with the making of the casting. After the casting is made a twelve-pound sledge is rapped all over the casting to knock the loose sand out of it; then a cold chisel is used to cut the gates and rising heads—that is, the rough excres-ences. That I do and that is all I do, except to inspect it by looking all over it for flaws visible to the eye. We rap it with the sledge and rub it over with a stone and clean it up ready for the lathe.

To the fifth interrogatory he answers: A dome ring is made of cast-iron two inches thick.

To the sixth interrogatory he answers: The plan is correct; the rest of the question is out of my line. I do not put the machine together.

To the seventh interrogatory he answers: The dome casing is made of cast iron three-quarters of an inch thick.

To the eighth interrogatory he answers: Cannot answer.

To the ninth interrogatory he answers: I gave this dome ring the same inspection that I gave all others—that is, by looking over, pounding, rubbing. The only way I could discover defects is in this way. You can find defects in the body of the metal by breaking up the piece. You can tell weak spots by pounding.

To the tenth interrogatory he answers: If it looks all right on the outside and sounds all right by pounding it, there is no way to tell that there is a defect. We never make any attempt to use

nor to remedy a defective casting. It is thrown aside and not used.

To the eleventh interrogatory he answers: Every man through whose hands the work goes looks for defects. As far as my department goes, I do not know of any other precautions that could be taken than we take. If it looks and sounds all right we can do nothing else.

To the twelfth interrogatory he answers: The railroad com-
43 pany could only discover a defect that we do not discover by breaking the piece of iron.

To the thirteenth interrogatory he answers: If there is any defect it should be discovered in my department. We all look for defects. The railroad company would have to take the dome cover and cap off and look for and sound for defects after the engine is built. I do not see how they could find it if we could not.

To the fourteenth interrogatory he answers: Of cast iron two-inches thick, which is cast, trimmed, and turned on the lathe. It is correctly shown in the plan.

To the fifteenth interrogatory he answers: I must have cleaned and inspected this dome ring, because I cleaned and inspected all the dome rings made in the works at that time—all had to go through my hands.

To the sixteenth interrogatory he answers: I did not do the testing; it was not in my line.

To the seventeenth interrogatory he answers: That is a mystery to me. I cannot say. The defect which I see now is that the iron didn't unite on the inside of the mass. There was a scale on the outside; I mean by this, the outside was smooth and perfect, but inside it did not unite. When I say the iron did not unite I mean that there was no space, but the iron came together as two flat surfaces coming together. I do not see how a railroad company could have discovered the defect.

To the eighteenth interrogatory he answers: I have examined the plans. It is a correct one. It is a plan of engine 513.

To the nineteenth interrogatory he answers: I know of no other reason than those given above.

To the first cross-interrogatory he answers: Baldwin locomotive works.

44 To the second cross-interrogatory he answers: No one.

To the third cross-interrogatory he answers: About fifty. Nothing called my special attention to this dome ring. I only recollect the general work.

To the fourth cross-interrogatory he answers: I do not care to express an opinion. It is not in my line.

To the fifth cross-interrogatory he answers: There were about forty-six rivet holes, spaced about the same distance apart. The casting failed to unite at around about twenty-eight of these holes and only partly united around some of the others.

To the sixth cross-interrogatory he answers. The flaw does not exist in the outside of said dome ring nor in the inside surface, but only in the interior of the mass. The rivet holes go through the

defect, I think. There is not a blow-hole nor honey-comb in it; there was a little dross washed up in the casting, in the top inner arm of the dome ring; this was not near the rivet holes and had nothing to do with the defect.

To the seventh cross-interrogatory he answers: The defect was probable made in the pouring of the casting of the dome ring.

To the eighth cross-interrogatory he answers: There was visible no cold-shot line.

To the ninth cross-interrogatory he answers: I cannot answer.

To the tenth cross-interrogatory he answers: I do not know.

To the eleventh cross-interrogatory he answers: I do know.

To the twelfth cross-interrogatory he answers: I saw no defect in it at the time, but the dome ring was unsound.

To the thirteenth cross-interrogatory he answers: I do not think it could.

To the fourteenth cross-interrogatory he answers: There
45 was no cold-shot line there, and therefore it could not be detected.

To the fifteenth cross-interrogatory he answers: The dome cap can be removed by taking out the bolts. I presume the throttle valve and valve seats can also be removed. If there was a cold-shot line or other visible defect in the dome ring he could see it if he examined it with a lantern, after taking of- the cap and cover.

AUGUSTUS WOLFE.

Answered, sworn to, and subscribed before us this 30th day of November, 1887.

THOMAS D. FINLETTER, [L. S.]
Commissioner.
HENRY V. MASSEY, [L. S.]
Commissioner.

Verdict.

We, the jury, find for the plaintiff ten thousand dollars.
Nov. 2, 1888.

S. S. PATTON, *Foreman.*

Judgment.

Whereupon it is ordered, adjudged, and decreed that the plaintiff, Henry Elliot, do recover of the defendant, The Richmond and Danville Railroad Company, the sum of ten thousand dollars ($10,000), together with interest from the 19th day of November, 1888, together with — dollars and — cents, costs of suit.

November 19, 1888.

GARTRELL & LADSON,
T. P. WESTMORELAND,
Plaintiff's Att'ys.

Judgment signed and filed in open court this 19th day of November, 1888.

O. C. FULLER,
Deputy Clerk.

46 *Bill of Exceptions.*

In the Circuit Court of the United States for the Northern District of Georgia.

Be it remembered that at the October term of the circuit court of the United States for the northern district of Georgia, in the year 1888, the Honorable W. T. Newman presiding, there came on for trial the case of Henry Elliott against The Richmond and Danville Railroad Company, being then and there an action for damages for personal injuries. A jury being regularly empannelled, the following evidence was introduced and exceptions taken:

HENRY ELLIOTT sworn:

Says that he is the plaintiff in this case, and on the night of the 26th of November, 1886, he was coupling cars for the Central Railroad Company in the Air Line yard, when an engine exploded in the yard, just below Oakland cemetery, about Elsas & May's factory. The engine belonged to the R. & D. R. R. Co., and I suppose I was about one hundred feet from it. My engine was standing on the main line, waiting for the R. & D. freight to pull out, which was on the side track of the R. & D. railroad. About eleven o'clock, as well as I recollect, there was an engine standing there making a fuss—what the boys call "popping off." I had been connected with the railroad for four or five years, and I had always an opportunity to notice the popping off of the pop-cock, which is on account of the engine being hot. On this particular night the pop-cock was making a fluttering noise, as if it was trying to blow off steam and got stuck. A piece of the exploded engine struck me and I lost the leg which is now missing (exhibiting it to the jury). I remember when I was struck, and was told that I remained unconscious for a half an hour or longer. I was on the ground, going to the switch, about two hundred feet from my engine and one hundred feet from that which exploded. When I was hurt I was between the cemetery and Elsas & May's shop, ahead of my engine, and was going to set the switch in order to let our train in on the track. I was in a house on Foster street when I came to consciousness, and from there I was taken to Dr. Westmoreland's office, who amputated my leg next morning, on the 26th. While my leg was being amputated I did not know anything about it; I was past suffering and was nearly a dead man. I suffered that night before the amputation as badly as a man can suffer. I suffered after the operation a great deal and was confined to my bed about six weeks. No further operation was made, and Dr. Westmoreland treated me for about four or five months. After that time I suffered so that I could not walk, from a piece of bone working out above where the limb was taken off, which took some four or five weeks to come out. After that piece of bone came through I also continued to suffer, and do still. On rainy and cloudy days I suffer more than at any other times. When I was injured I was going on twenty-seven years old, was in good health, and was receiving one dollar and a

47

half per day. I had been working in the capacity of coupler and switchman for between four and five years.

Q. What, if anything, were your prospects for rising?

Mr. JACKSON, of counsel for defendant: I object to that. His prospects for rising I do not think are proper elements of damages for which he can recover either under the declaration or under the law.

Mr. LADSON, of counsel for plaintiff: I had not completed my question.

Q. What were your prospects for rising, if any, in your employment on the railroad and of obtaining higher wages?

Mr. Jackson still objected to the question.

Mr. Ladson insisted that it was legal.

By the COURT: Go on and I will see how you get along.

48 Mr. BARROW, of counsel for defendant: We will object to it in any form, because it is purely speculative.

By the COURT: I am against you, Mr. Barrow, unless you show me some authority on the question. I will try and control it with the jury when it goes in. Let him go on and see what he can prove about it.

(By Mr. LADSON:)

Q. Who was your superior officer at the time you were hurt?

A. Mr. R. Schmidt.

Q. I mean just above you in control of that train.

A. Mr. Burnett.

Q. What was he?

A. He was my conductor.

Q. You state that Mr. Burnett was your conductor and the officer immediately in charge?

A. Yes, sir.

Q. State your grounds for believing that you would acquire a position as yard conductor, such as Mr. Burnett had.

Mr. JACKSON: The witness has not stated that he would acquire that position. There has not been the slightest intimation of it until it falls from counsel.

Mr. LADSON: I will probably cure the gentleman's objection by another question.

Mr. Jackson objected to the form of the question.

(By Mr. LADSON:)

Q. What is the next grade of officer after the coupler, such as you were?

A. Conductor.

By the COURT: Where is the brakeman—where does he come in?

A. The head coupler and the switchman—a man who minds switches. He does not have much to do with switching the cars. He does whatever the coupler says.

Q. Just state to the jury what position you had reason to believe that you would acquire in rising, and state why you think so.

A. Well, I think so by staying there. I stayed there and served my time out first. I filled several men's places there.

Q. What places?

A. I filled Mr. Banks' place, my yardmaster.

49 Q. State that so the jury can understand it.

—. Mr. Banks would be out and I would go and take his bills and draw them off on a slip of paper and go out and get the cars and get them up and draw the numbers off and give them to the yardmaster in the office.

Q. You have at times discharged the duties of yard conductor?

A. Yes, sir.

Q. You said something about serving your time out.

A. There is a system by which you go in there as coupler or train hand or in the yard, and if a man falls out you stand a chance of taking his place.

Q. State whether or not there are yard conductors in the employment of the railroad and others who at one time were couplers.

Mr. Jackson objected to the question on the ground that it was entirely irrelevant.

By the COURT: It seems to me that it is improper, Mr. Ladson.

Q. What salary does the average yard conductor obtain?

A. They get from sixty to seventy-five dollars.

Q. A month?

A. Yes, sir.

To all of this testimony in reference to the possible promotion of plaintiff the defendant objected, and on the objection being overruled an exception was then and there duly noted by the court.

A. The book-keeper told me my doctors' bills were between three and five hundred dollars. I am now living off of borrowed money and have no capacity to labor. When I was injured I received forty-five dollars per month.

Cross-examination:

I have never been an engineer. I acted as fireman a few days. I do not know what caused the popping of steam on the engine.

Plaintiff offered in evidence the interrogatories of W. M. Lewis.

Mr. JACKSON: If your honor please, this witness was in the

50 court-room this morning and in attendance under a subpœna. I think I can show that fact, and that being the case, the interrogatories are inadmissible.

Mr. WESTMORELAND, of counsel for plaintiff: This testimony was taken before a commissioner in the city, a city of ten thousand inhabitants. We have got a right to read it; we are not obliged to put him on the stand. Both sides were represented at the taking.

After argument, it appearing that the deposition was taken under § 3893 of Code of Georgia of 1882, the objection was overruled to

the admission of the depositions of W. M. Lewis over objection, the defendant then and there excepted, and the exception was duly noted by the court.

Mr. Ladson then read to the jury the interrogatories of W. M. Lewis as follows:

1. In November, 1886, I was fireman for the Richmond and Danville railroad.

2. In November, 1886, Elliott was hurt near the Fulton Mills crossing, in the Air Line Railroad yard.

3. The right-hand pump of the engine, which pumps water into the boiler, was out of order and failed to pump that night. Then the engine got hot and failed to pop off, causing it to explode.

4. One minute before the explosion the register showed one hundred and fifty pounds of steam.

5. The engine was drawing a freight train bound for Charlotte.

6. It had been out of the round-house about an hour and a half preparatory to making the trip to Charlotte.

9th. The pop-valve was out of order when it was delivered to us to go to Charlotte.

If the pop-valve had been in order it would have gone off at one hundred and forty pounds of steam.

11. Directly after the explosion I saw Henry Elliott about
51 100 feet from the engine, with his leg knocked to pieces by a part of the dome ring.

12. It was a piece of piping full of flaws—that is, it was nearly burnt to pieces, being full of holes and thin like an egg shell.

13. It was not a suitable or safe piece of machinery to be used on an engine.

14. The explosion tore the shelves from the front of a store across the street and cut a sill in two.

Cross-examination:

I left the Richmond and Danville railroad because they would not pay me for my lost time nor damages for getting hurt in the explosion.

I left it before I began suit against that road.

I now have a suit against that road for $2,500, growing out of this explosion.

When the explosion occurred I was sitting on the side of the engine cab, looking out of the window.

I knew the right-hand pump was out of order before the explosion, because the machinist who was working on it told me it was out of order and that he could not altogether remedy the defect because he did not have time, as he was working on it only a half an hour before the explosion.

How an engineer could control a defective pump I don't know, unless he sent it back to the shop.

The defective pump did not force any water into the boiler from the tank, and so the engine got hot.

I don't mean to swear that it did not force water at all, but not

enough. I have been railroading only one month and don't understand all about these things.

I don't know whether the failure of a pump to work will always render an engine so hot as to cause it to explode.

52 I suppose the pump has to force water into the boiler to make steam for the valve to pop off.

It seems there should — water enough in the boiler to keep it from getting hot; if there is steam and water enough in the engine to cause it to explode. I hadn't been working long enough to understand the effect of the pump upon the explosion.

The valves always pop off at 140 pounds. That was the only engine that I was ever on that carried 150 pounds.

The explosion burst the dome ring off the boiler and broke it into pieces, I think.

I examined the edges of the pieces of the dome ring and it was full of flaws, such as would be made while casting. I think I could have seen the crack that was in the dome before the explosion. I know there was a crack, because there was a space of about two inches that appeared old, while the balance was fresh.

It was in the night and therefore I did not see the crack, but it could have been seen in the day.

I had never been on this engine before or cleaned it. I suppose the engineer had been on the engine before, as he had been working with the road for years.

The explosion never rendered me unconscious. I got my arm full of glass and a severe lick between my shoulders.

E. W. BURNETT sworn for plaintiff:

On November 25, 1886, was in the Central railroad and Air Line yards, working from one to the other, and that night the plaintiff, one of my couplers, was injured by an exploded engine, which stood about thirty feet from us. Elliott was going down the Air Line road to the switch. I was a conductor and Elliott was coupling cars. The engine was making a peculiar noise about

53 the pop-valve where the steam goes off. I am not experience- in engines. The gauge holds so much steam, and then it pops off. I have been railroading about eight years and never heard an engine make a noise like that; it seemed as if the valve was hung and the steam could not escape. Elliott I have known about ten years. He was the first man who ever coupled cars for me and was a more experienced railroad man than I was. He was faithful to his duty and I could trust him with my own business when I wished to go to town at night.

Q. What is the custom, Mr. Burnett, as regards the employment of couplers—the promoting of them to other positions?

Defendant objected. Objection overruled.

Q. What is the custom regarding the promotion of couplers in railroad yards? The next step from where he was at the time he got hurt would have been to have had charge of an engine, what we call a yard conductor.

To the overruling of the above objection the defendant then and there excepted, and the exception was duly noted by the court.

My first employment was changing switches.

Cross-examination:

I am not an engineer nor mechanic nor machinist and only know the parts of an engine from my duties as a conductor. I worked five years in the Georgia ice factory with the boilers and where I had something to do with stationary engines. When an engine pops off it sometimes pops off for awhile and then stops. The gauge is set to carry a certain number of pounds of steam, and when it goes over that it pops off. When a valve gets fastened they do not pop off. If an engine has enough steam to keep over the number of pounds it will continue to pop off, otherwise it will stop. If it is set at 140, when it arrives at that number it will pop. I have seen a locomotive pop off a little and then stop when the valve was in good order. I am certain that the engine was trying to pop
54 off, making a noise as if it was choked up. It was rolling backwards, and as it stopped the explosion took place. When it was in motion I heard it trying to pop off. I saw the piece of iron which is supposed to have struck Elliott lying by his side. My opinion that the engine was trying to pop off is based upon the noise I heard. I never examined the boiler. I never heard an engine make that sort of noise before. The explosion followed almost instantly upon the peculiar noise, just as the engine stopped. My reason for giving the opinion that it was trying to pop off is because I never heard that noise before. From the time I first heard the noise up to the time of the explosion I suppose it was ten minutes, though I can't exactly state the time.

Upon motion the court then ruled out the testimony of the witness as to his opinion that the engine was trying to pop off, being based upon the fact that he never heard an engine make that noise before.

FRED. KROGG sworn for plaintiff:

I am now a farmer; formerly ran as engineer for about twenty-five years. On Nov. 25, 1886, I lived at 318 Decatur street, when an engine exploded out there on the track. I went there and saw an injured man, with his head lying across the Georgia road, main line, on a cross-tie and a hat over his face. He was unconscious, I suppose. My house was distant in the neighborhood of one hundred and seventy-five or two hundred yards from the engine. I was just in the act of going to bed, when I heard the noise made by pops on engines, and then I heard an unusual noise, which I thought must have been the cylinder plates blown out, and then I heard the cars rebound. I walked out to where I saw the head-light, passing a man lying on the ground with a hat over his face, and some one told me that "old hog," meaning a ten-wheel engine, "had blown up." I picked up a piece of dry pipe which they said struck the

man. I prevented a man from knocking the arch out of the
55 engine, as I knew the water would blow out with the dome cap. The noise of the pop-valve sounded as if there was not enough pressure to lift it and let the steam escape. There are a great many reasons for the noise. One is that it might have been set at 140 pounds and there being 130 pounds in the boiler, caused it to simmer. Another reason would be that it might have been screwed to probably 200 pounds, and when that amount was not in the boiler, it would cause it to simmer. Another reason would be that the cock might be choked or not sit level on its seat. If it was set at two hundred pounds, and that was more than the capacity of the boiler, something would have to give way. An unequal pressure on the bearings would prevent it from working. Black oil has a tendency to gum the valve, but it would not cause it to refuse to work to any extent. If the oil did cause it to stick and the valve was not relieved by the steam in two or three months, it would corrode and stick to the seat, so as not to relieve the boiler at all. The noise I heard was unusual enough to attract my attention. If the pop failed to work I could not distinguish the difference in the noise that would be made by 138 pounds or 150 pounds, the pop being set at 140. When I first heard the bubbling I was in my room and it continued less than a minute.

Cross-examination:

I don't know which of the two engines made the noise referred to. If a perfect pop is set at 140, 138 pounds will cause it to fret. If there was a defect in the boiler or dome the engine would explode whenever the pressure was greater than the boiler or dome could bear. The noise would be similar to the explosion of the cylinder. If the pop was stuck it would not make any noise, but would finally lift by the pressure of the steam. If it was cocked to one side it would fret. If the cock was in perfect order and set at 140 it would blow off a little before it reached that number, at 125. The
56 dome of an engine has a casing of wrought iron, and that is covered. This photograph (illustrating) represents the dome in its finished condition; this is a plain case of iron, with the top off, and this is the dome in the rough state. To see a defect in the dome the casing has to be stripped off. The iron is three-sixteenths of an inch thick. I casually noticed the cast-iron dome which was blown out of the engine; all the water and ste-m went with it. If the engine had been in use for six months it would be a very careless man who wouldn't care about the pop. If the valve had popped off just a few hours before, it would be conclusive proof that it was in good working order. When I first heard the noise the pop was fretting and a perfect valve would do this with the steam barely up to the discharging point. We frequently put tallow on pop-valves.

You cannot see the dome from the exterior, and that was the only part of the engine that I saw, except a piece of dry pipe on the gound, which could have been forced out through the opening.

W. M. POSTELL sworn for plaintiff:

On Nov. 26th, 1886, I was setting switches; was with the same engine as plaintiff, who was a coupler. When the engine exploded I was about fifty or seventy-five yards away. Before the explosion the pop made a fizzing noise, as if it was struck. When the valve is all right, it blows off and relieves the engine. Sometimes the valve will make this noise, and then blow off. I had worked on the railroad for seven or eight years as a fireman, and was then setting switches. The noise I heard was a humming sound, like a bumble bee makes. Most new engines do that. I believe this engine had not been here long.

Cross-examination:

I heard it blow off. When the explosion took place I was about seventy-five yards away. The engine passed within four or five feet of me and I had a good opportunity to see what it was doing. It was making a fuss, blowing around the dome. I am positive
57 that it was blowing, the steam escaping, and it looked as if it would pop all the time. My attention was attracted to it, and I have had opportunity for observing engines pop off and know the noise it makes when it is blowing off. I don't know whether it ever popped. The blowing continued up to the time of the explosion, which was about a minute afterwards. I am certain that it was blowing when it passed me, and continued to do so.

W. J. EATON sworn for plaintiff:

Is a moulder and have been since 1861; is now the foreman of the foundry of the Atlanta Bridge and Axle Co. I cannot state the number of rivet holes in the iron that failed to unite without counting them. I have counted them with you before, but I don't remember the number. This is a pretty bad piece of work. It is supposed to be the dome ring of a locomotive, and is the part that the steel or iron sheet is riveted to. My idea of the defect is that the iron was poured into the mould on the bottom part, and they just lacked the amount of iron that would have taken to fill the mould up, and they did not have it ready to pour in. By the time the iron was poured in on the top the bottom part had set so it wouldn't unite. They might have said, "Pour." We generally have some one to say "up," and they said pour, and when they got the iron in there it was too cold to unite with the top part. The bottom piece is on the other part, and they filled the metal in until it just came to that height, the middle being higher than the outside; consequently when the iron was poured in it was higher in the middle and low on the outside edges. That shows that the iron raised so high through the middle that the edges would not rise as high. The steel or iron had gotten too cold for it to unite, although it seems to have done so in some places, probably being a place that did not get as cold as the balance, and of course more ready to unite. The holes are driven through the flaws. There seem to be cold-shot lines; in it, that is

where the iron failed to unite. The person who drilled the
58 holes through the flaws in this iron could very readily, by the use of ordinary care and diligence, have discovered it. The cold-shot line on a part of this piece — machinery is one thirty-second part of an inch and would have shown very plain in the casting. I can observe the cold-shot lines distinctly. There are also a number of defects called blow-holes or honeycomb places, and the casting is on that account defective. The blow-holes weaken a casting. I think the machinist who turned the ring on the lathe or boring mill could have discovered the flaws upon careful inspection; the machinist who drilled the rivet holes through the flaws could have very readily discovered them. I should say the ring, on account of these defects, was wholly unfit for use. After the ring was made and before riveted to the boiler a careful inspector could have discovered the defects by sounding, as it has an entirely different ring from one properly united. I don't know what space there is in an engine for one to see the casting; if there was no obstruction to keep one from seeing the casting he could see very readily by the aid of a lantern or torch the cold-shot line. I have worked with several foundries that make railroad castings. I don't know whether the railroads have inspectors to examine the work; we simply made the rough castings and sent them to the shops to be finished. When the casting comes out of the mould the first thing to be done is to clean the sand from it, then shape off the rough places and finish it. A cold-shot line suggests that two lines have not come together and leaves a seam; it is not as strong as if united and suggests that it is considerably defective and unfit for use.

Cross-examination:

Does not know the character of the Baldwin locomotive works for building locomotives. The defect in the iron is in the casting and was made in pouring the metal. The cold-shot line would have shown on both inside and outside of the piece; there is no
59 crack, simply a line. This part of the locomotive when finished is covered with a shell or piece of steel. I don't know whether the line could be seen after the engine was put together or not. If the casting could have been seen the cold-shot line could have been observed. It could not be observed from the outside. The bottom as it goes on the engine is the top of the casting as moulded; the metal through which the rings are put was the last poured in the mould.

J. W. Peacock sworn for plaintiff:

I am a moulder; have been for thirteen years, and am now working at Winship machine shops. This — a dome ring, as I am told, but it is not a sound casting. I think the defect was caused by the short metal; it poured short and was then filled. My opinion is they had no more metal when the iron reached a certain point and had to go back to the furnace for it, and the time intervening

between the time they stopped to go back for more metal caused the iron to cool and it failed to unite. I only notice three places where the iron seems to have united. The rivet holes are bored through the flaws and I notice honey-comb, as we term it; also some blow-holes and cold-shot lines that are clear to any man's eye. My opinion is that the machinist who turned the lathe or boring mill could have discovered upon careful inspection said defects or flaws. An observing mechanic who drilled the rivet holes would undoubtedly have noticed the flaw, as there was nothing to keep him from doing so. On account of the defects and flaws, the casting was radically unsound. Before the ring was riveted to the dome a boiler inspector could have discovered the flaws by carefully sounding the casting, I have no doubt, and it could have been seen without sounding.

If the interior of the dome could have been seen with the aid of a torch or lantern the cold-shot line could have been discovered by an inspector. I think the man who bored the rivet holes could have discovered the flaw without careful inspection.

Cross-examination:

All defects are in the casting. In my opinion, the piece containing the blow-holes was the last metal poured in, as that is the usual custom of making a casting of that size. If the casting could have been seen at all, the cold-shot lines could have been observed. I am not acquainted with locomotives, but I think this line could have been seen from the inside, as there is a cap which could be taken off. If it was full of pipes where the cap is taken off it could not be seen. Of course, it could not have been seen with the covering on the dome, but if that was taken off it could be discovered, and also by taking off the cap. The opening covered by the cap is about fourteen and a half inches.

J. J. FINNIGAN sworn for plaintiff:

Has been a boiler-maker for nineteen years. Anybody can see that the casting was defective. If it had been solid it would not have come apart in this way. I can see the breaking-line through the center of the rivets; in some places it has united, in others it has not. A great many of the rivet holes are drilled through the honey-comb and flaws. There exists blow-holes and honey-comb which makes the casting defective. I think there is undoubtedly a cold-shot line appearing about the center of the rivet holes where the casting failed to unite. The machinist who turned the ring on the lathe or boring mill should have discovered the flaws as well as the mechanic who drilled the rivet holes through the flaws should have discovered them, if he had been attending to his business. The dome ring, on account of these defects, was radically unsound and unfit for use. After the ring was made a careful inspector could have detected the defects by sounding it. It is not very hard to remove the dome of an engine; it can be done. If this was done I think a careful inspector, by the aid of a lantern, could have discovered the flaws where the rivet holes showed the failure of the two cas-ings to

unite. I can see the cold-shot line on the iron, and I think
61 in driving the rivets it would raise the metal and leave a crack. Some parts are solid and in others it has failed wholly to unite. When I was boiler-maker the railroads always inspected the engines and looked them over carefully. There is an equal pressure on all the parts of the boiler, with the exception of the bottom, and the same care should be given to the construction and examination of the dome ring.

Cross-examination:

I can construct anything in my line. The defect in this piece of machinery was in the casting and was made in the manufacture. I don't know whether the locomotive works drilled the holes and riveted the dome ring to the boiler, but I suppose it was all built in one factory. If an engine was delivered by the Baldwin locomotive works to the R. & D. R. R. Co. the drilling of the rivets would be done at the locomotive works; a casing would be over the dome, called the lagging, and over that a jacket, and these casings, together with the cap, would have to be taken off to see the inside of the casing. To see within the dome after the cap was taken off by removing the rivets, the throttle valve which passes through the boiler would have to be removed in order for one to view the dome ring. Then the safety valve or whistle would also have to be removed for a man to get in the aperture. In the explosion the dome cap must have been blown away.

Redirect:

A big man could not get through the opening. If the throttle valve was not removable a lantern could be placed therein. By unscrewing the nuts the valve and dome cap can be removed.

Cross-examination:

All parts of an engine are attached together and can be taken apart.

Redirect:

The lagging and casing could be taken off by the same process. After the casing was stripped I don't know whether the cold-shot
62 line could be seen from the outside without some of the bolts came above the lap of the two parts. Whatever was exposed could be seen.

Cross-examination:

The center of the whole is about an inch and a half above the lap. If the bolts went on the outside it might cover some of them, and if the flaw went through the center of the holes and the lap covered them the defects could not have been seen when the casting was stripped. When the engine was completed the whole was covered.

Plaintiff introduced Carlisle table, on page 845, and annuity table, on page 847, of 70th Georgia Reports.

A. W. GIBBS sworn for defendant:

On Nov. 25th, 1886, was the master mechanic of the Atlanta & Charlotte division of the R. & D. R. R. Co., located at Atlanta. My experience in the construction of railroad engines began with my studies. After finishing them I went to the Penn. railroad shops, at Altoona, where I remained two or three years; then I became connected with the Richmond & Danville and took charge of the drawing and designing of that company for about five years. In August, 1886, I was appointed master mechanic at Atlanta. A few minutes after the explosion and before the pieces had gotten cold I was at the place of the accident. I had the fragments of the engine gathered up and taken to the shops. The large piece in court was blown entirely out. It is my opinion that the casting was not completely poured into the mould; that there was not enough metal to completely finish it, so that it partially cooled, and when the last metal was poured in it failed to unite. It is perfectly clear, from an examination of the piece after the accident, that there are places where the iron was broken through and united over hardly enough surface to hold together. There is no difficulty now in discovering the defective casting of the dome ring. The officers and em-
63 ployees of the Richmond and Danville R. R. Co. were prevented from seeing this defect before the explosion on account of a sheet of steel about half an inch thick which comes up high enough to surround the whole line, completely hiding it. In photograph No. 1 the engine is represented as in service, in which the cap is surrounded by a sheet-iron ring. In photograph No. 2 there is a sheet of iron, after removing which you come to the steel sheet; after that is a lot of wood to keep the heat out, and when this is removed the entire sheet is exposed. In order to remove all these coverings it is necessary to take the engine out of service, allow it to cool off, put it where you can get at the dome, and take it off. There is nothing to have prevented us from discovering the cold-shot line if we had taken off the casings. When an engine is in good order we do not see the reason of taking it to pieces. To get in it the cap nuts would have — be unscrewed, taken off, and the valve taken out, unless the person was a very small man. The exploded engine was made by the Baldwin locomotive works, in June, 1886, and was delivered to the railroad company about the 25th or 30th of June. I was on it when it was tried. The Baldwin locomotive works, which builds locomotive engines in Philadelphia, are the most extensive manufacturers in the world. They are considered the best, and there is none better. They have been engaged in the business since 1832. I made an examination of the engine after explosion to ascertain if there was any shortage of water. There was no leakage or usual signs. Where there is an absence of water there is a slight scale on the surface where it has been overheated. There is a change in the color and structure of this scale, and it shows very plainly. If there had been a shortage of water I would have discovered it from the appearance of the scale and the top tubes, which, if this had been the case, would have been out of order. "Fretting" is not a usual term applied to locomotives.

When the pop is in perfect condition there is no sound. Very
64 often a pop-cock, when it arrives at the point where set, will open suddenly and let the steam down two or three pounds. The working pressure of the Richmond & Danville engines here is 145 pounds. I do not know from my own knowledge the pressure on this particular engine. The only part of the engine which exploded was the dome, a part of which is in the court-room. When this large space was opened the steam and water rushed out, carrying with the same pipes. The boiler was all right, and is working to-day. The models show the condition of the dome before the explosion. The photographs are taken from engines in use. This is a crude sketch of a pop-valve.

Cross-examination:

I don't know the point at which the gauge was set on this engine. Sometimes the pop will begin to hum several pounds before it reaches the set pressure, and it does not show that the valve is out of order. When the valve is perfectly tight there would be no preliminary warning to the escape of steam, but where the surface was a little rough there would be more or less humming. If the valve was set at 140 pounds and screwed too tight, there being enough rough surface to allow the steam to escape, so as to run up to 150, the same noise would be made. I never saw a piece of machinery like this before. I tried to have my moulders produce a duplicate, but they could not get the defects in the right place. The defects in the casting of this piece are very unusual. There is an entire absence of any unity in the place where twenty-four rivet holes are drilled. There is also a number of defects known as blow-holes or honey-comb. From a close inspection a continuous line could be discovered where the casting failed to unite, and it looks to me as if the machinist who turned the ring on the lathe or boring machine and the one who drilled the holes could have discovered the flaws. I did not purchase the engine nor do I know the man who did. The gradual escape of steam from the pop-valve is not
65 an indication of danger, but rather relieves the pressure, as it tends to let the steam off.

J. E. CUMBEA sworn for defendant:

I was a machinist and am still in the employ of the R. & D. R. R. Co. On the evening before the explosion of the engine I saw it, but did not work on the right-hand pump. I know William Lewis by name. I never worked on the right-hand pump because there was none on the engine. I put water into the boiler through the injector and found that in perfect order. I ran the engine from the shops about three-quarters of a mile and the injector worked perfectly. I did nothing to it when I left the shop. I adjusted the pop-valve to what I knew was the proper pressure and to my knowledge it popped off at 135 pounds, as I had screwed five pounds below the ordinary pressure, 140 pounds.

Cross-examination:

I have been in the employ of the Richmond and Danville seven or eight years. My pay was raised from that of a journeyman out two years ago just before this explosion. Before that time I was an apprentice. I came down on the engine to set the valve, and as the engine stopped within a square of my home I rode instead of walking, although it is not customary for machinists to do this unless they want to. I don't know whether I saw Mr. Lewis, the fireman, before the explosion of the engine. I don't know who was the fireman. After I brought the engine to the stopping place I worked on the valve stem or stuff-boxes, as I had to reverse some rings in which I had put some patent packing with which I was not very familiar, but I found out that it was wrong and changed it. I have no idea how many trips the engine had made. I am not sure whether I ever worked on it before, but I think I put in a broken eccentric some time preceding or after the explosion. It did not get out of order, to my knowledge, more than twice, as above stated.

66 There are other machinists in the employ of the road. At least five minutes before I left the engine I am certain that it popped off at 135 pounds three or four times. When I came the gauge was at 80 pounds, with which amount of steam and even 20 pounds any engine of that — can be run; 135 is the usual pressure, but they are allowed to carry 145 pounds of steam. Pops vary in the amount of steam they allow to escape, from one to ten pounds; the greater the escape, of course the less the danger.

Redirect:

The valve I worked on had no connection with the boiler. It was in the steam chest under the smoke-stack. In doing work on an engine it is sometimes the custom to let the steam escape as rapidly as possible, so the pop is screwed down to a less amount of steam. A man about a pop has to be very accurate, under the rule of the company. From my knowledge and experience as a machinist the pop-valve on this engine was in perfect order.

The steam chest receives the steam for the boiler. The injection is superior to a pump, is on the side of the boiler, and operated by three handles. I did no work on this injector, but simply operated it and put water into the boiler. The packing which I put in was placed around a piston which works into the steam chest, which is on top of the cylinder, and as it was patented it had to be put on in a certain manner or the steam would escape, and thus the power would be lost. I merely changed its position. It has nothing to do with the pop-valve and injector and is on the front of the engine, on the left side of the smoke-stack.

Defendant then read as evidence the interrogatories of Davis H. Hansell, William Shinn, James Brown, Jr., James Heenan, Charles S. Phillips, Augustus Wolfe, and William Gibbs.

Direct examination of DAVIS H. HANSELL:

1st. I am not acquainted with the parties to this suit.

67 2nd. In June, 1886, I was in the iron-foundry business at the Baldwin locomotive works, Philadelphia, as foreman of the foundry, in which position I have been for eleven years. I have been engaged in such work for twenty years, and during that time I have been a moulder and foreman.

3rd. I was foreman of the foundry in June, 1886, and oversaw all the iron castings for engine known to us as 10-34-E, 513, and subsequently known to the defendant as engine No. 515.

4th. The dome ring was cast in the iron foundry of the Baldwin locomotive works. I had the hiring of the men, and the iron for the work was provided for them by me out of the company's stock. Castings are made and delivered to the cleaning department of the foundry. We examine all the castings, and if any defects exist they are laid aside. I do not recollect particularly examining this casting, but it must have been examined before leaving my department.

5th. The connection between the dome ring and boiler of an engine does not come within my department. I simply make the casting and then I am through with it.

6th. On the annexed diagram B is the dome ring, A is the dome cap, and F the dome casing. I cannot answer as to what casings cover the dome, because that is not in my department.

7th. I do not fit the dome ring to the top of the boiler. The ring is made of cast iron two inches thick. I don't know the space between the ring and the casing. The dome casing is made of cast iron from $\frac{5}{8}$ to $\frac{3}{4}$ of an inch in thickness.

8th. I cannot tell how the work is finished, how the rivets are clamped, or how the various casings of metal and wood are put together, as it is not in my department.

9th. I remember the particular engine spoken of. The dome ring was of cast iron two inches thick. I gave the ring in question a general supervision, as I do all others. I oversee personally all cast-iron castings made by the Baldwin locomotive works,

68 although I do not see every piece. I examine every piece of defective work personally. There is no possible way of detecting the flaw in the casting. If the slightest crack is seen it is thrown away, and we would discover if the dome ring was defective by looking for cracks in the casting. The rule of the works is that if a defect is discovered by any man at any stage of the work the piece is thrown out. I would discover if there was any defect in the casting of any dome ring made in 1886 in the manner above described.

10th. If a defect is discovered in the casting it is thrown out; no attempt is made to remedy it. No such defective casting, to our knowledge, ever went out of the foundry.

11th. There is no other possible way to discover defects in the casting than those used by us and described above. As to the other

parts and the system of discovering defects in them I cannot say, as that is not in my department.

12th. The dome ring is covered by the dome casing, so that its condition is not visible to the eye; the dome casing intercepts a view of the dome ring where it is riveted to the boiler.

13th. If I discover any defects while casting is in my position it is thrown away; if a defect is afterwards discovered by any one through whose hands it passes it is thrown away. After the engine was completed to discover a defect in the casting of a dome ring would be impossible, if the defect is not apparent. I do not know of any means a railroad company could take to discover such defects than those taken by us. We take every possible precaution to have the castings perfect and to detect flaws therein.

14th. The dome ring of engine 513 was constructed as before described. I cannot give its condition.

15th. I supervised the casting of this dome ring and all
69 other dome rings and castings made by the Baldwin locomotive works in June, 1886.

16th. After the boiler was completed. I cannot tell what test was made of the work.

17th. I have examined the casting mentioned and cannot say how it passed the test of pressure. The union of the metal in the casting does not seem to be perfect, although there was no defect in the surface. The only way to have discovered a defect of this kind would have been to break up the iron. It is evident there was a defect in the casting. The metal did not unite in the interior, and the only way for the railroad to have discovered the piece was by breaking up and destroying it.

18th. The annexed plan is a correct representation of the dome, dome ring, and casing of Baldwin engine 513.

19th. I could not have found such defect, and I do not see how the railroad company could have done so, as it is a defect which can only be discovered by breaking the casting.

Cross-examination:

1 am now in the employ of the Baldwin locomotive works.

2nd. There are present, besides myself and the commissioners, William Shinn and Mr. Wolfe.

3rd. In the month of June, 1886, I superintended the construction of about forty dome rings. There was nothing to call my attention particularly to this one, and I do not remember the casting of any particular ring.

4th. There is as much pressure on the dome ring as on any other parts of the boiler, and the same care should be given to its construction.

5th. There were forty-six rivet holes around the bottom of the ring where it is fastened to the dome; the distances between them I do not know. The iron failed to unite around about two-thirds of the holes and only came together around seven or eight.

6th. The flaw in the dome ring exists in the center of thirty five or

six rivet holes; the holes are drilled through the place where
70 the metal failed to unite. I saw no blow-holes. There is a drossy substance which exists in the bowl of the casting, but this had nothing to do with the break, nor does it make the casting defective.

7th. The flaw in the dome ring was made in the casting, as well as the drossy substance.

8th. There was not discernable, while the ring was in possession, a cold-shot line on it about the center of the rivets.

9th. I could not say if the machinist who turned the bottom of said dome ring upon the lathe or boring machine could have discovered the defect.

10th. I cannot say if the machinist who drilled the thirty-five or six rivet holes through the point where the casting failed to unite could have discovered the flaw by a careful examination.

11th. I cannot say if the machinist who riveted the dome ring to the dome proper could have discovered the flaw on account of the separation of the disunited parts of the dome ring caused by the driving of the rivets.

12th. If it could have been discovered the dome ring should have been rejected, but the defect could not be discovered.

13th. I could not say whether a competent boiler inspector could have detected the flaw by carefully sounding the ring before put together, as I never made such an examination.

14th. The cold-shot line did not appear while the ring was in my possession. If it had appeared on the surface that would have shown a defect, and we would have thrown it out.

15th. The dome cap is easily removable, and on the removal of the same an inspector could have seen the inside of the dome by the aid of the lantern or torch. If the cold shot was there, and was on the surface and visible, it could be seen in such an examination, but a cold-shot line below the surface of the metal could not be discovered except by destroying the substance.

71 Direct examination of WILLIAM SHINN:

1st. Does not know the parties to this suit.

2nd. In June, 1886, I was engaged by Davis H. Hansell as a moulder in the Baldwin locomotive works, and have been at that occupation for fourteen years.

3rd. I cannot account for the engine. I worked on all the domes that were taken out of the shop at that time, and made the castings at the rate of four or five a day.

4th. I made the castings of all domes, but do not recollect this particular dome ring in the casting, although I must have made it. I make an examination by sight and by pounding it over with a bar weighing about eighty pounds. A perfect dome has a regular ring, and this dome must have sounded properly or it would have been thrown out. All domes that do not sound right are thrown aside by Mr. Hansell, the forman, or casting inspector.

5th. The dome ring is made of cast iron, two inches thick, and in the shape shown by the diagram annexed to these interrogatories.

The connection between the dome ring and the boiler of an engine does not come within my department.

6th. I have examined the annexed diagram, and it gives a correct idea of the construction and materials of the upper part of a boiler. I cannot answer as to what casings, &c., cover the dome.

7th. The dome ring is made of cast iron, two inches thick. The dome casing is made of cast iron, from $\frac{3}{8}$ to $\frac{3}{4}$ inch thick. I don't know the space between the dome and the casing, nor do I fit the dome to the boiler.

8th. I cannot tell how the work is finished, how the rivets are clamped, or how the different casings of metal and wood are put together.

9th. I do not remember this particular engine, but suppose I cast the ring, as I cast all dome rings during May, 1886, at the
72 Baldwin works, which was the time the casting for the engine was made. The dome ring was made by me in the manner described. I made the mould, got the iron, cast the dome ring for this engine and four more at the same time out of the same ladle of metal. The casting for this engine was made in May, not in June, 1886. I could discover if the casting of this dome ring was defective by sight, by pounding, and by punching it all over. I could discover defects in the dome rings made in June, 1886, in the same manner.

10th. The defect in the casting could be discovered as I have said. If it was discovered no attempt was made to remedy it; it was thrown aside and melted up.

11th. The castings were examined by me and by two other hands before it left my department; no other precautions could have been taken to discover a defect.

12th. I do not know how the ring is riveted to the dome, the obstacles that prevent one seeing the condition of the dome, and what precautions the railroad could have used, as that is not in my line.

13th. Any defect that is on the surface can be discovered at any stage of the work by any one who desires to make an inspection.

14th. The dome ring was cast the same as all others, and no defects were found in it or it would have been thrown aside.

15th. I made the castings of the dome rings of all engines made by the Baldwins up to May 27, 1886.

16th. After the boiler was completed I do not know what test was made of the work.

17th. The iron had a good hold on certain parts, and on others, where it was defective, there is a shell about $\frac{1}{8}$ of an inch thick. The head on the inside ring was about the thickness of an egg shell and helped to hold it together. The flaw was made by a bubble of gas which got in the casting; the defect may happen on the
73 surface or it may happen through the body of the iron. If it is on the inside of the iron it cannot be detected until torn in pieces; the railroad people would have had to have broken it up. There was no open cavity left in the body of the iron, but the particles united on the outside, the weight of the metal ran over the top

and squeezed the gas out, and the iron came together but failed to unite. I never saw anything like this casting.

18th. The dome ring is — correct representation of this and all others.

19th. The defect was in the interior of the iron and it could not be discovered unless the iron was broken up.

Cross-examination:

1st. I am now in the employ of Samuel J. Cresswell, Philadelphia, Pa.

2nd. There are no persons present besides myself and the commissioners.

3rd. I cast no dome rings in June, 1886; in May I did, at the rate of four or five a day; nothing called my attention to this special ring and I cannot specify it.

4th. The amount of pressure on different parts of the boiler is out of my line.

5th. There are a large number of rivet holes, about two-thirds of which are bored through where the iron failed to congeal or unite and the others through solid iron.

6th. The iron united on the outside but not in the body of the metal at the point where the rivet holes were bored and these holes were bored through the flaw. I do not see any blow-holes or honeycomb.

7th. The flaw may have been in the molten iron; it may have happened in the pouring of it or in the casting.

8th. When the casting was turned out I saw no cold-shot line; had I seen such it would have been thrown aside. I see no
74 cold-shot line now. The defect was due to the failure of the casting to unite.

9th. As to whether the machinist who turned the casting upon the lathe or boring machine could have discovered the defect is not within my line.

10th. So also as to the machinist who drilled the rivet holes.

11th. So also as to the machinist who riveted the dome proper to the dome ring.

12th. The dome ring was unsound or it would not have exploded.

13th. I do not know whether a competent boiler inspector could have discovered the defect by sounding. I do not think so, as I sounded it myself, and it must have been all right or it would have been left in the shop.

14th. I saw the inside surface of this dome ring before it left my possession, and I did not see a cold-shot line because I would have thrown it out. I don't see how any inspector could have seen a cold-shot line if I did not.

15th. As to whether the dome cap, throttle valve, valve seat could be removed, and as to whether a careful inspector could, with the aid of a torch or lantern, have seen the inner surface of the dome ring, is not within my line.

Direct examination of WILLIAM GIBBS:

1st. Does not know the parties to this suit.

2nd. I am a machinist, in the employ of the Baldwin locomotive works, and have been such since 1867.

3rd. I worked for the Baldwin locomotive works in June, 1886, and had charge of getting out all dome rings, rocks shafts, eccentrics, sand-box works, stack-works, and other small jobs. I supervised the work on engine 513, but did not actually do the work myself. I had the charge of six men, who did the turning and lathework of all dome rings at that time. This particular ring must have been under my charge.

75 4th. I suppose the dome ring was cast in the foundry of the Baldwin works. I have no connection with that. It is delivered to me in its rough state and I turn the top surface of the dome ring in a lathe. I then trim off the parts where it fits into the shell of the dome, just below the letter "B" in the annexed plan. I do not recollect this particular casting, but we always watch carefully for flaws or defects. If the piece is defective it is rejected. In my department it is not pounded or rung, but is examined on the lathe by sight. I suppose this dome ring was examined by a man when it was being turned on the lathe.

5th. I am a machinist and cannot speak particularly as to the connection between the dome ring and the boiler and the purpose for which constructed.

6th. The annexed plan looks correct, though I do not put the machines together.

7th. The part I take in fitting the ring to the casing is to trim off the edge as described above. The dome ring is made of iron one and a half, or perhaps two, inches thick.

8th. The only finish I give to the dome is to trim off the surface of the ring.

9th. I do not remember this particular dome ring. I suppose the turning was done as I have described it, for the reason that they are all done that way. I could discover any defects while turning off the surface by looking at the ring.

10th. By the process stated, if a defect is discovered in the casting nothing is done to remedy it. It is thrown away. No defective casting was knowingly used by us.

11th. We all inspect our work. It passes through several hands, all of whom look for defects. At any stage of the work a defect might show. I know of no other way to discover them than

76 by looking, pounding, and ringing the metal.

12th. I do not know what other precautions a railroad company could take than those we take.

13th. Defects can be discovered at any stage of the work.

14th. I suppose the dome ring was made as I have told. It must have looked perfect when it passed out of my hands or I would not have passed it.

15th. I superintended personally the turning off of all dome rings turned in 1886.

16th. After the boiler was completed I do not know what test was made of the work.

17th. I have examined the dome ring and cannot say how it passed our tests. The defect was in the casting of the ring and occurred because the iron only partly congealed. The metal did not unite, except on the outside of the ring, where a solid surface was presented to the view. Since it has been broken I can see that there is a defect in the body of the metal. It presents the appearance of the two surfaces which have come together and failed to unite. I do not think the defect could have been discovered while in my hands, as it was impossible for me to see it and I do not know any other way to discover the flaw.

18th. On the annexed diagram the dome ring looks correct.

19th. I do not see how the railroad could have discovered the defect if we did not in turning it. After examining it now I do not see how I could have discovered it then. The iron shows such sharp edges that it is nearly impossible to see it. If we had seen any trace of a crack we would have dug into it with a chisel to see how deep it existed.

Cross-examination:

1st. I am now employed by the Baldwin locomotive works.

77 2nd. Messrs. Brown, Heenan, and Phillips, besides myself and the commissioners, are present at the taking of this evidence.

3rd. During June, 1886. I assisted in getting out ten or twelve dome rings per week. Nothing called my attention specially to this ring.

4th. I cannot answer as to the pressure on different parts of the boiler.

5th. I have examined the dome ring, and some of the rivet holes go through the flaw which was on the line where most of the rivet holes were drilled.

6th. The flaw is where the rivet holes are and can now be seen on the surface of the dome ring. The explosion has forced it apart, so that it is now visible. There are no blow-holes nor honey-comb in the metal near the crack or at any other part of the dome ring.

7th. I do not know when the flaw was made, but, in my opinion, the defect must have happened in the casting.

8th. We could not have seen a cold-shot line or we would have thrown it out.

9th. Neither I nor any other machinist could have discovered the defect. We were looking at it while it was being turned, as we always do.

10th. I do not drill the rivet holes and cannot — whether the machinist who did so could have discovered the defect.

11th. I cannot say if the machinist who riveted the dome ring to the dome proper could have discovered the defect.

12th. The ring shows that it was unfit for use, but we could not have discovered it.

13th. I don't — whether a competent boiler inspector could have detected the flaw by sounding the ring.

14th. Before the dome was riveted together I don't think an inspector could have discovered a cold-shot line on the inside surface.

The scale on the surface appears to be solid.

78 15th. It is not within my department to say whether the dome cap could be easily removed and that after done an inspector with the aid of a lantern or torch could have discovered a shot line in the surface of the dome ring.

Direct examination of JAMES BROWN, JR.:

1st. I do not know the parties to this suit.

2nd. In June, 1886, I was in the employ of the Baldwin locomotive works, as a latheman or machinist, in which occupation I have been engaged for thirteen years.

3rd. I was the only man who did such work on dome rings in June, 1886, and if it was made at that time I must have worked on it.

4th. While the ring was being turned I stood alongside of it, and if a defect was discovered I reported it to Mr. Gibbs, who had the piece thrown aside.

5th. The dome ring is made of cast iron about two inches thick.

6th. The annexed diagram looks very much like the upper portion of an engine.

7th. The dome ring is constructed of cast iron two inches thick.

8th. I do not do any of the finishing work.

9th. As I turned all dome rings made at that time, I must have turned this one. I turned off about half an inch. If anything was discovered on the surface, it was followed up with a chisel and rung with a hammer to find the defect.

10th. Any defect would have been discovered, as I have said. If one was found, nothing would be done to remedy it, but it would be thrown away.

11th. The work was examined at all stages. I cannot think of any precautions which could be taken other than we take to discover defects in castings.

79 12th. I cannot think of any other way of discovering the defect than what I have said.

13th. After the engine is completed I cannot say how the defect could be discovered. I know of no other way except to ring it or see it. I don't see how the railroad company could have taken any other precautions than we did.

14th. The dome ring of the engine was made on the plan shown.

15th. I turned the dome ring personally, as I did all rings made at the works in June, 1886.

16th. After the boiler was completed I cannot tell what test was made of the work.

17th. I have examined this dome ring after it had been broken. There was nothing to show the flaw on the surface when I turned it or it would have been reported. I don't know how the railroad company could have discovered it, if we could not.

18th. The diagram looks like all dome rings.
19th. The defect did not show on the outside of the iron.

Cross-examination:

1st. I work for the Baldwin locomotive works.
2nd. Messrs Gibbs, Heenan, and Phillips are present besides myself and the Commissioners.
3rd. I turned about ten or twelve dome rings a week and nothing, called my particular attention to this ring.
4th. I do not know the pressure on the different parts of the boiler.
5th. Some of the rivet holes go through the flaw
6th. I do not know how many rivet holes are drilled through the flaw. I see no blow-holes or honey-comb.
7th. I cannot answer when the flaw in the ring was made.
80 8th. I do not know what a cold-shot line is, as I do not cast iron.
9th. I made a careful examination of this dome ring while it was being made, and I do not think any machinist could have discovered the defect. I examined it carefully while it was being turned, and did not detect it.
10th. I don't know if the machinist who drilled the holes could have discovered the flaw.
11th. Also as to the one who riveted the dome ring to the dome proper.
12th. The ring would have been defective and unfit for use if we could have discovered the defect.
13th. I do not know if a competent boiler inspector could have discovered the flaw by sounding the ring.
14th. I do not know if a competent inspector could have detected the flaw by a cold-shot line on the inner surface of the ring.
15th. Likewise I cannot say if it had been discovered by removing the throttle valve, etc., and seen with the aid of a lantern or torch.

Direct examination of JAMES HEENAN:

1st. I am not acquainted with the parties to this suit.
2nd. In June, 1886, I was in the boiler shop of the Baldwin locomotive works, in which occupation I have been engaged for eighteen years. I have worked on dome rings and as a riveter.
3rd. I did the riveting of the dome, shells, waste, fire doors and boxes.
4th. I examined the ring before and after I riveted it. I used a lamp, went inside, examined it carefully, but did not pound it.
5th. I do not know the connection between the dome and the balance of the engine, nor the purpose of its construction.
6th. The annexed plan is correct.
81 7th. The dome is fastened together by rivets. The ring is an iron casting two and a half inches thick. The dome casing is made of steel or iron one-half an inch thick.

8th. Rivets are four inches long and seven-eighths of an inch thick. They have a head with which they are fastened on the inside of the boiler by hydraulic pressure. Where the dome ring is fastened to the boiler the rivets are two and an eighth inches apart.

9th. I don't remember this particular engine, but I did the work I have mentioned on all engines and dome rings. If the defect was "exposible" I could have seen it upon the examination I made.

10th. If the castings were defective this could not be discovered unless the defects were visible to the eye, or by the pressure test, or by pounding. Defective work is condemned and not used.

11th. Each man is ordered to inspect the work and look for defects. I know of no other precautions that are possible to be used.

12th. The work is closely examined at the point where the rivets are driven to fasten the dome ring to the boiler. If a defect is not seen it is impossible to discover it, and I do not see how a railroad company could do more to that end than we could.

13th. Defects should be discovered in the foundry or at any time afterwards while the work progresses. I do not know how they could be discovered after the completion of the engine.

14th. The engine was riveted in the parts referred to as all others were. I examined the rivets in the boiler shop after the water pressure was put on; when it left my hands it must have been all right.

15th. I riveted the dome ring to the boiler, examined it on the inside with a lamp, and if there had been defects I would have discovered them and condemned the work.

16th. After the boiler is completed a water pressure is forced on the work, but I do not do that.

82 17th. I have seen this dome ring and cannot say how it passed the pressure test. The defect resulted from a cause unknown to me. There was an opening where the metal failed to unite, but could not be seen on the surface, nor do I think the railroad company could have seen it.

18th. The annexed plan is a correct diagram of engine No. 513.

19th. The defect could not have been seen, because it passed all the tests.

Cross-examination:

1st. I am with the Baldwin locomotive works.

2nd. I worked on about twelve dome rings a week.

3rd. Nothing called my attention to this particular ring, and I do not especially remember it.

4th. I think there is as much pressure on the dome ring as on any other part of the engine, and the same care should be given to its construction.

5th. There were forty-six rivets about the place where the dome ring is fastened to the boiler, and the spaces between them vary by an eighth of an inch. The distance between them is about two and an eighth inches. Through the flaw twenty-eight rivet holes appear to be drilled, but I do not believe that they passed through a flaw at the time.

18th. The diagram looks like all dome rings.
19th. The defect did not show on the outside of the iron.

Cross-examination:

1st. I work for the Baldwin locomotive works.
2nd. Messrs Gibbs, Heenan, and Phillips are present besides myself and the Commissioners.
3rd. I turned about ten or twelve dome rings a week and nothing, called my particular attention to this ring.
4th. I do not know the pressure on the different parts of the boiler.
5th. Some of the rivet holes go through the flaw
6th. I do not know how many rivet holes are drilled through the flaw. I see no blow-holes or honey-comb.
7th. I cannot answer when the flaw in the ring was made.
80 8th. I do not know what a cold-shot line is, as I do not cast iron.
9th. I made a careful examination of this dome ring while it was being made, and I do not think any machinist could have discovered the defect. I examined it carefully while it was being turned, and did not detect it.
10th. I don't know if the machinist who drilled the holes could have discovered the flaw.
11th. Also as to the one who riveted the dome ring to the dome proper.
12th. The ring would have been defective and unfit for use if we could have discovered the defect.
13th. I do not know if a competent boiler inspector could have discovered the flaw by sounding the ring.
14th. I do not know if a competent inspector could have detected the flaw by a cold-shot line on the inner surface of the ring.
15th. Likewise I cannot say if it had been discovered by removing the throttle valve, etc., and seen with the aid of a lantern or torch.

Direct examination of JAMES HEENAN:

1st. I am not acquainted with the parties to this suit.
2nd. In June, 1886, I was in the boiler shop of the Baldwin locomotive works, in which occupation I have been engaged for eighteen years. I have worked on dome rings and as a riveter.
3rd. I did the riveting of the dome, shells, waste, fire doors and boxes.
4th. I examined the ring before and after I riveted it. I used a lamp, went inside, examined it carefully, but did not pound it.
5th. I do not know the connection between the dome and the balance of the engine, nor the purpose of its construction.
6th. The annexed plan is correct.
81 7th. The dome is fastened together by rivets. The ring is an iron casting two and a half inches thick. The dome casing is made of steel or iron one-half an inch thick.

8th. Rivets are four inches long and seven-eighths of an inch thick. They have a head with which they are fastened on the inside of the boiler by hydraulic pressure. Where the dome ring is fastened to the boiler the rivets are two and an eighth inches apart.

9th. I don't remember this particular engine, but I did the work I have mentioned on all engines and dome rings. If the defect was "exposible" I could have seen it upon the examination I made.

10th. If the castings were defective this could not be discovered unless the defects were visible to the eye, or by the pressure test, or by pounding. Defective work is condemned and not used.

11th. Each man is ordered to inspect the work and look for defects. I know of no other precautions that are possible to be used.

12th. The work is closely examined at the point where the rivets are driven to fasten the dome ring to the boiler. If a defect is not seen it is impossible to discover it, and I do not see how a railroad company could do more to that end than we could.

13th. Defects should be discovered in the foundry or at any time afterwards while the work progresses. I do not know how they could be discovered after the completion of the engine.

14th. The engine was riveted in the parts referred to as all others were. I examined the rivets in the boiler shop after the water pressure was put on; when it left my hands it must have been all right.

15th. I riveted the dome ring to the boiler, examined it on the inside with a lamp, and if there had been defects I would have discovered them and condemned the work.

16th. After the boiler is completed a water pressure is forced on the work, but I do not do that.

82 17th. I have seen this dome ring and cannot say how it passed the pressure test. The defect resulted from a cause unknown to me. There was an opening where the metal failed to unite, but could not be seen on the surface, nor do I think the railroad company could have seen it.

18th. The annexed plan is a correct diagram of engine No. 513.

19th. The defect could not have been seen, because it passed all the tests.

Cross-examination:

1st. I am with the Baldwin locomotive works.

2nd. I worked on about twelve dome rings a week.

3rd. Nothing called my attention to this particular ring, and I do not especially remember it.

4th. I think there is as much pressure on the dome ring as on any other part of the engine, and the same care should be given to its construction.

5th. There were forty-six rivets about the place where the dome ring is fastened to the boiler, and the spaces between them vary by an eighth of an inch. The distance between them is about two and an eighth inches. Through the flaw twenty-eight rivet holes appear to be drilled, but I do not believe that they passed through a flaw at the time.

6th. The flaw is above the rivet holes and runs around the dome cap. There are no blow-holes or honey-comb in the casting.

7th. I do not know when the flaw was made in the casting.

8th. I could not see any cold-shot line at the time, because it was not there; the flaw was beneath the surface.

9th. The flaw was not visible to the machinist who turned the ring, because he did not go that far into it.

10th. If there is no vacancy in the mass of iron I do not think the machinist who drilled the holes could have discovered the defect. The drill might go through the hollow and cause it to catch,
83 thereby giving him notice of the defect.

11th. If the defect was there I could have detected it, as I drove the rivets myself, and made an examination of the work after it was finished.

12th. The ring was not unsound, in my opinion, when it passed through my hands.

13th. I do not believe the defect could have been discovered by sounding the casting.

14th. I do not believe a cold-shot line could have been seen on the inside surface of the dome ring, as I saw neither that nor any other defect.

15th. If the cap was taken off the dome the inside could have been seen, but I do not believe a cold-shot line or other defect could have been seen with the aid of a lantern or torch.

Direct examination of CHARLES S. PHILLIPS:

1st. I am unacquainted with the parties to this suit.

2nd. I have been a machinist in the Baldwin locomotive works for eleven years. During that time I have run a planer, shaping machine, general bench-work, general erecting, had charge of stationary engines and boilers, and am now assistant foreman of the erecting works.

3rd. I superintended putting the engine together in running gear and also applied the test to the boiler. This is one of several engines made for the same company. I do not recollect the particular engine, but I worked on it, as it is charged to me on the books.

4th. The casting and boiler were examined by me at 180 pounds water pressure, which was followed by a steam test of 130 pounds.

5th. The dome ring is made to finish the top of the dome and is constructed of cast iron two inches thick, as shown by the annexed plan.

6th. Said plan is correct; there is an half-inch steel plate, then three-quarters of inch wood, and then a sheet-iron jacket one-
84 eighth of an inch thick.

7th. The dome ring is turned, fitted closely, and then riv-ted. There is about an inch and a half space between the ring and dome cover. There is no space at all between the dome ring and the dome casing, which is of sheet iron about an eighth of an inch thick. It is marked on the plan as E; the cover is marked F.

8th. The dome ring marked B is fastened to dome C by forty-eight rivets seven-eighths of an inch in diameter, two and an eighth

inches pitch or space between the rivets. The wood jacket D is fastened by sheet-iron bands to C; E is slipped over the whole thing, and A is the dome cap, which is studded on with copper joints to B by ten studs seven-eighths of an inch in diameter. F is the dome cover, made of cast iron and fitted to dome cap A and dome casing E. It is to make a finish and to hold the heat. The dome-ring rivets are fastened in by hydraulic pressure and are not clamped. They have heads.

9th. I recollect this engine as one of the ten or twelve engines made *of* the same company. I do not particularly remember it, but it is charged to me on the books of the company and was made in the manner above described. I tested the work by escaping water at a pressure of 180 pounds and steam at 130 pounds. Under our system of detecting flaws by leaks, it would have been impossible to have discovered the defect, located where it was. The only thing was to have blown it up.

10th. In the turning or drilling or water-pressure test, if a defect exists in the casting above the caulking, no attempt is made to remedy it and it is condemned.

11th. The work is divided up and done by specialists in every branch. Each man is instructed to take care and watch for defects. There could not be any other precautions taken than we take.

12th. The railroad company could take no precautions to discover the defect, because it is hid from view by three casings, two
85 of iron and one of wood, entirely covering the dome ring.

13th. The defect should be discovered at any point of the work. After it was delivered it could be detected by a bad leak. I don't think the railroad company could take any precautions to discover a flaw in the casting of the dome ring.

14th. The dome ring to this engine was constructed in our usual way, as described above. The condition when delivered was perfect and it was built as shown by the annexed plan.

15th. I saw that this boiler was tight and in good condition, as I did to all boilers in my charge.

16th. It passed the pressure test, because the defect was below line B of the caulking. It was caused by a failure of the metal when the two surfaces came together, to unite, and I don't see how the railroad could have taken any precaution to detect a flaw in the casting.

17th. We put on the two pressures, as I stated above.

18th. The diagram is a correct plan of locomotive engine No. 513.

19th. I do not see how the flaw could have been detected, as it was inside the metal.

Cross-examination:

1st. I am employed in the Baldwin locomotive works.

2nd. There are present none others besides the commissioners and myself.

3rd. I tested about ten dome rings and boilers in June, 1886, as I have above stated. I do not particularly recollect this engine.

4th. The pressure is the same on the dome ring as on the other parts of the engine and the same precaution as to it is required.

5th. I counted 48 rivet holes, each 2⅛ inches apart. The metal wholly failed to unite around 28; partially united around 6 or 7, and totally united around 7 or 8.

86 6th. The flaw does not exist on the outside of the dome ring, but the rivet holes are drilled through the defect.

7th. I know the flaw happened in the casting.

8th. There was not discernable on the surface of the ring a cold-shot line, because it was not there.

9th. I do not think the machinist who turned the ring could have discovered the defect, because the flaw was in the interior.

10th. I think that the metal was too compact for it to be discovered by drilling.

11th. If the rivets had driven the casting apart it would have been noticed, but they did not do so.

12th. The dome ring was unfit for use and if it could have been discovered it would not have gone out of the shop.

13th. I do not think a competent inspector could have detected the flaw in the dome ring, before it was put together, by sounding it.

14th. There was no cold-shot line to detect, but if it had been it could have been discover*ing* on removing the dome cap.

15th. The dome cap, throttle valve, and valve seat could easily be removed by the railroad company, and an inspector, with the aid of a lantern or torch, could have seen the interior of the dome ring at and around the place where the flaw exists; but he could not have discovered it, because it was below the surface of the metal.

Direct examination of AUGUSTUS WOLF:

1st. I do not know the parties to this suit.

2nd. I have been employed by the Baldwin locomotive works as cleaner and inspector of all iron castings for fourteen years. For two years I had charge of patterns.

3rd. I must have cleaned and inspected this dome ring.

4th. It was cast in the Baldwin foundry. After it was made I rapped all over it with a twelve-pound sledge and used a

87 cold chisel to cut off the rough excres-ences. It is then rubbed over with a stone and inspected to find flaws and defects.

5th. A dome ring is made of cast iron two inches thick.

6th. The annexed plan is correct, but I am not acquainted with the different casings covering the dome.

7th. The dome casing is made of cast iron three-quarters of an inch thick.

8th. I cannot tell how the work is finished and how the different casings are put together.

9th. I gave this dome ring the same inspection that I did to all others, by pounding, rubbing, and looking at it; these are modes of discovering defects that I know of. A flaw in the body of the metal can only be detected by breaking it; a weak spot will show on being knocked with a hammer.

10th. If it looks all right upon an inspection and sounds all right when it is pounded, there is no other way by which a flaw can be detected. We never attempt to remedy the work, but if it is found unsound it is thrown aside.

11th. Every man through whose hands the work passes looks for defects and, so far as my department goes, I know of no other way in which they can be discovered.

12th. The only way for a railroad to discover a defect not noticed by us would be to break up the iron.

13th. If there is any defect it should be discovered in my department, but every man watches for such. After the engine is built the railroad company would have to take off the dome cover and cap and sound the ring for defects, but I do not think they could have discovered any which we failed to notice.

14th. The dome ring is of cast iron two inches thick, which is cast, trimmed, and turned on a lathe. The diagram represents a dome correctly.

88 15th. I must have cleaned and inspected this ring, because all rings passed through my hands at that time and were cleaned and inspected by myself.

16th. I cannot answer as to what test was put to the work after completion.

17th. It is a mystery to me how the casting stood the pressure. The defect that I now see is the result of the iron fa-ling to unite in the mass, although a scale appears on the outside which was smmoth and perfect. The iron came together within as two smooth surfaces do and formed a defect which the railroad company could not have discovered.

18th. I have examined the annexed plan and it is a correct representation of an engine and of engine No. 513.

Cross-examination:

1. I am with the Baldwin locomotive works.

2nd. No one is present at the taking of the evidence herein except myself and the commissioners.

3rd. In the month of June, 1886, I inspected and cleaned about fifty dome rings; nothing called my attention particularly to this ring.

4th. I do not care to express an opinion as to the pressure on different parts of the boiler, as it is not in my line.

5th. There were forty-six rivet holes, spaced about the same distance apart, where the ring was united to the dome. The casting wholly failed to unite around 28 and only partially united around others.

6th. The flaw does not exist on the outside of said dome ring nor in the interior surface thereof, but is within the mass. There are no blow-holes or honey-comb in the casting; there is a little dross, but this does not exist near the rivet holes and had no connection with the fracture.

7th. The defect was probably made in pouring the metal
89 for the dome ring.

8th. There was no visible cold-shot line on the surface thereof.

9th. I cannot answer if the machinist who turned the ring upon the lathe could have discovered the flaw.

10th. I cannot likewise answer as to the machinist who drilled the rivet holes.

11th. Neither can I answer as to the machinist who riveted the dome ring to the boiler.

12th. I saw no defect in it at the time, but the casting was unsound.

13th. I do not think an inspector could have discovered the flaw by sounding the dome ring.

14th. There was no cold-shot line and therefore it could not have been detected on the inner surface of the dome ring.

15th. I suppose the dome cap, throttle valve, and seats can be removed. If a cold-shot line or other defect was then visible it could have been seen with the aid of a lantern or torch.

W. F. WESTMORELAND sworn for plaintiff:

I am a surgeon; treated the plaintiff for three or four weeks and amputated the upper third of his thigh. I think I charged two hundred and seventy-five dollars for the amputation and twenty-five dollars for after treatment. The pain attendant upon an amputation of this character is always severe.

Cross-examination:

My bill has never been paid by the Central railroad.

Redirect:

In amputations there is very frequently neuralgic pains attendant, sometimes slight and in bad weather worse. Persons generally
suffer more or less during their lives, but I do not know in
90 point of fact whether or not Mr. Elliott, suffers, as I never asked him any questions.

Here Mr. Jackson, of counsel for defendant, tendered in evidence the record of a suit brought by attachment against the Baldwin locomotive works in favor of Henry Elliott now pending in this court.

The declaration claimed the sum of twenty thousand dollars damages for the same injuries as are sued for in this case. So far as material, the allegations in said declaration were as follows:

"Your petitioner shows that said explosion of said engine was due to its unskillful, improper, and defective condition; said defects consisted in the dome of said engine being unskillfully and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode. Said engine was defectively constructed in other respects, to wit, the dome castings were full of flaws, the same was not securely and properly riveted and fastened to the dome proper,

and there was a large crack or flaw in the dome casting or cap near where it was riveted to the dome. Said dome casting was of infirm material, unskillfully made, and unfit for the use intended."

"This plaintiff further shows that said defendants are engaged in the business of manufacturing and selling locomotives in the State of Pennsylvania; that they manufactured and constructed the engine which exploded as aforesaid, and disposed of the same to the Richmond and Danville Railroad Company, to be used by said railroad company on its road at Atlanta and on other points on said company's line of railroad. Said explosion occurred but a short time after said defendants sold said engine to said company."

"That said defects which caused said explosion existed at and during the time said engine was being constructed, and that said defendant knew, or could by the exercise of ordinary diligence have discovered, said defects, and that they were guilty of gross and criminal negligence in so defectively constructing said engine.

91 "That said defendant knew that said engine was a powerful and, being improperly constructed, a very dangerous machine; they knew that the same was intended to be used by said railroad company on public highways and other places where the people lawfully meet to transact business, and that — an explosion of said engine would follow death or injury to some person or persons."

"That said defendants concealed said defects from said railroad company and falsely represented to said company that said engine was safely and properly constructed, thereby deceiving said railroad company. Said action of said defendants in so sending forth said defective, dangerous, and infirm machine to be used by said company as aforesaid was wrongful and productive of imminent danger to the persons and lives of others, as witness the injury to petitioner as above related, was a violation of law and of their duties and obligations in that regard; for which wrong and damage they, the said defendants, are answerable to this plaintiff, the law imposing upon said defendants as builders of ponderous, powerful, and dangerous machinery, which they knew is intended to be used in the public marts and on the highways where people lawfully meet and assemble (the improper and defective construction of which will likely and naturally endanger the person and lives of others), the duty to carefully and skillfully construct the same."

To this evidence the plaintiff objected on the ground that it was not germane to the case before the court, as it was *res inter alios acta*. The objection was sustained and the evidence excluded; to which ruling the defendant then and there excepted and asked that its exception be noted by the court, which was duly done.

Defendant again tendered the record aforesaid in evidence, including the demurrer filed to the said declaration by the said Baldwin locomotive works, upon the ground "that the matters and things alleged in plaintiff's declaration are not sufficient in law, and

92 that no cause of action appears against these defendants in the statements of said declaration."

Also the judgment of the court overruling said demurrer in the following language: "After hearing argument on the within demurrer, it is ordered that the same be overruled."

To this evidence the plaintiff objected and the objection was sustained; to this ruling the defendant then and there excepted and asked that its exception be duly noted by the court, which was done.

C. F. THOMAS sworn for defendant:

Has been the master mechanic for the Georgia division of the E. T., V. & Geo. R. R. since 1885, and as such officer I am acquainted with the character and use of locomotives. I am acquainted with the general custom of railroads in regard to the reception of locomotives from the works. The locomotive works generally send an agent along with them to put them up and try them in the presence of the officers of the railroad. The machinery is disconnected, as a general rule, and these parts are put together by the locomotive works' agent; the engine is then tried on the road. The machinery to be put together are the connecting rods, pistons, and such gear. The boiler and its attachments are supposed to be in good condition and the dome cap is not taken off for examination of the inside. When the locomotive is tried the steam is usually put up to the regular working pressure; if necessary that pressure can be 180 pounds to the square inch on consolidated engines such as are used by the Richmond and Danville. We run them at *at* 145 pounds. I have examined these castings and did so about a week after the accident. The piece exhibited *in* the dome casing. These defects could not have been discovered by the railroad company without stripping the sheets from the dome. I have a doubt as to whether it could have been discovered after the sheets were stripped, as the dome sheet proper was above the bolts, and on the inside the
93 iron shows solid. It is probable, from the looks of things, that the lagging held the dome together, and I do not think with the casing removed that the defects would have been seen. Prudence and care does not require that a railroad company — to take an engine to pieces when received, as it is supposed to have been made by experts & tested; it is also tested in the presence of the railroad officers when received; it would be a very heavy expense to do this. I am acquainted with stationary engines and in all departments of life where steam is used, in ginning cotton, threshing wheat, in saw-mills, etc., I never knew a new engine to be taken to pieces before it was started. I have been in this business since 1874, having been connected with the Pennsylvania R. R., the Mobile & Montgomery, Louisville & Nashville, and the Chesapeake & Ohio roads.

Cross-examination:

I am now in the employ of the East Tennessee road. I don't know that my road is owned by the Richmond and Danville or that it is leased by that company, although I understand that it is. The rods extending from the driving axle, from the steam chest—the valve that works the piston and the machinery of the locomotive is de-

tached when received, which comes as freight, usually running upon its own driving wheels. I was at Richmond, Va., before I came to Atlanta for about one year as master mechanic. I speak of the customs of railroads generally not to examine the boilers and casings of locomotives from my knowledge of the railroads with which I have been engaged. Officially this is all I know as to this custom, but from my intercourse with other roads I take it to be general custom to rely upon the manufacturer. The dome cap and throttle valve can be removed. When that was done an inspector, by the aid of a torch or lantern, could have seen a portion of the dome ring and its inner surface. You would have to remove the valve box and the other machinery in the way, and
94 then the inner surface, where the rivets come through, can be seen, I suppose, though if a lamp is held in there the heat would burn one's face to stand over it. I don't know whether a person could introduce his head into the aperture without removing the valve seat. This would depend upon the size of the valve, the person's head, etc. If a lamp was dropped in the light would be on one side of the valve and the face of the inspector on the other. In the majority of cases it is necessary to take the throttle box out in order to get in a small boy to make repairs. After taking out the machinery in the dome a small boy could get in, though with the dome full the lamp could not well be introduced. There appears to be a cold-shot line on the part of the surface. The dome contains six or eight pipes an inch in diameter, then a cast-iron pipe from the bottom, about two-third- of the way up, secured with bolts. The middle box is bolted to that. On that is placed a valve with a system of levers extending generally down and back to the cab, to be worked by the engineer in most engines, though I don't know about this one. There are pipes put up for air pumps, injecting pipes, so as to get dry steam. In a majority of cases it is connected with a series of pipes called dry pipes, throttle pipes, and stand pipes. The valve box, with the throttle therein, is about the middle of the dome, from eight to eleven inches in diameter, made usually as large as the dome will hold. In this case, I suppose, the box was from nine to eleven inches in diameter and situated right under the dome cap. To see the blow-places in this casting this box would have had to be taken off.

Cross-examination:

I don't know whether in this engine the dry pipe extended up to the dome ring. In order to get a boy into the dome the throttle box and stand-pipe would have to be removed. After having been removed a man fourteen inches in chest, the size of the aperture, could get in.

T. L. THROWER sworn for defendant:

On Nov. 26, 1886, I was a locomotive engineer. I know
95 the engine belonging to the R. & D. R. R. Co., known as No. 515, and was on it when the explosion took place. Just before the explosion the steam gauge showed 130 pounds. As far as

I know, the injector was in perfect order, as well as the other parts of the machine, and I was on it prepared to take it out.

Cross-examination:

I always inspect the engine that is given to me. I cannot make a minute inspection, but partly through all the machine. The pressure may have been 135 pounds. Before the explosion I am positive that during the time I was on the engine, about half an hour, the pressure was never greater than 130 pounds. When I got to the engine there was a gentleman working on the stuffing boxes. I am now in no way connected with the Richmond and Danville. I have never run this engine, and about three or four months after the explosion I left the road. I think that engine had only been running regularly for about a month. To the best of my recollection, the engine with which Elliott was working was on the main R. & D. line.

M. L. COLLIER sworn for defendant:

I am now master mechanic of the Western & Atlantic R. R. Co., and have *have* been connected with railroads and machinery generally for twenty-eight or thirty years. Since 1884 I have been in my present position. I am acquainted with the construction of locomotives, and when a new engine is bought from locomotive works of established reputation it is not practicable nor does safe and prudent management require that it should be stripped and taken to pieces in order to discover defects. I have never noticed any such custom. I am acquainted with the standing of the Baldwin locomotive works; they are as good builders of locomotives, if not the best in our land and country. I know nothing contrary to their being considered first class. The Western & Atlantic railroad has frequently bought engines from them, and we have always found them
96 so in our dealings. If an engine explodes on account of a failure of water in the boiler an expert can afterwards detect it. The result of no water in the boiler causing an explosion would be demonstrated by the fact that the ground sheet would bear down from the top of the boiler, disclosing large seams. The fire-box of a locomotive has walls on either side, called the side sheets, and there is another sheet with perforated places or holes therein on which the fire rests; the rear end of it has a door and the top portion is securely braced; around it runs an iron box of water; the dome cap and dome ring is some distance above the fire box. The first intimation that the engineer would have that the water was too low would be the bell mouth of a fusible plug inserted therein standing upwards. If that plug, which is made of lead, melted it would blow down and put out the fire; if there should be a limestone or other sediment over it, which protected it from the heat, the seams around the top portion of the ground sheet would open the flues and there would be a leak sufficient to cause the sheet to come down. If the explosion had occured on account of a defect in the dome ring and the ring and dome casting had been blown out, with ever-thing in the boiler below perfect, the ground sheet being

perfect, the fusible plug not interferred with, there being no leakage, I do not think it possible for the engine to have exploded on account of low water. This piece of iron seems to be the bottom of the dome casting and appears to have been riveted on the outside. For many years I have not seen the piece riveted from the inside. The casings and *and* steel plates that finish the dome go on the outside. The steel sheet which is riveted on the dome ring sometime- varies in height above the lap of the dome ring from five-eighths to three-quarters of an inch. I can't tell how high this sheet came. These steel iron plates are considered part of the boiler, are intended
97 to assist in holding the steam, and when they are riveted on the dome neither the ends of bolts nor any other object below the lap of the two pieces can be seen. Around all this we put a lagging of poplar wood, over this a close-fitting piece of iron, and over this another piece of iron, which is painted and finishes the dome. Taking the model as representing the casting, around it is placed the casings referred to. The first photograph shown me represents the finished dome, the second with the cap removed, and the third, showing the lagging, represents the dome without the wrought-iron sheet. If there was a flaw or defect in the dome ring it could not have been discovered in its finished condition. It could have been seen if the throttle and all the pipes inside the dome had been taken out, so as to allow one to get in. I have had long experience with machinery and steam boilers and consider myself an expert.

Cross-examination:

The dome cap and throttle valve could be easily removed; the dome covering can also be removed, and with the throttle out the reverse of the casting could have been seen if the inspector had gotten inside. It would institute ten or fifteen dollars' expense. A machinist could not have done it in an hour, though with help he might have done it in two hours. I think with the help of another man I might take out the machinery in three hours, and by rushing at in this manner it would not have cost fifteen dollars.

There is no reason for a machinist to hunt for flaws in the dome ring any more than in other parts of the engine.

There is as much pressure on the dome and as much reason to inspect it as the other parts of the locomotive. There are a great many rivet holes in the dome, and, of course, that makes the
98 iron weaker; it is the weakest part of the ring. A locomotive rarely blows up through the dome. If from low water it usually does through the ground sheet. This is the first case of the kind I ever saw; it seems to have been a very bad casting.

In order to take out the throttle box and piping the engine would have to be taken out of the service and for the time could not be run. Engines are not operated continuously.

The pressure on all parts of the boiler *are* supposed to be equal; however, I have found that the bottom of the boiler wears out quicker than the other parts; it generally gives way on the top or side.

This is the first engine I ever knew to have exploded through the dome. The cylindrical part of the boiler, the circle and sheet iron are riveted together in longitudinal seams, being one mass of rivets. Where rivets are very thick there is a tendency to weaken the metal, and this remark applies to all places generally.

D. E. BROOKS sworn for defendant:

Is a boiler-maker for the Richmond and Danville and is acquainted with engine No. 515, which exploded in Nov., 1886. I examined the boiler after the explosion and found no indications of shortness of water. The only thing done to the engine to put it in running order was to replace the casting in the dome; the boiler and ground sheet were in good condition.

Cross-examination:

I had other machinists to help me put in the new dome casting.

A. W. GIBBS reintroduced for defendant:

Engine 515 was received by the railroad company in June, 1886, and in August, 1886, I took charge of the shops here. I was stationed at Richmond, Va., when the engine was delivered. The Baldwin and other locomotive works have experts to go out
99 with engines in order to put them together; have them tested in the presence of the railroad officials and then deliver the machines formally to the companies. I know that this was done in the case of this engine because I was there and went out on the engine with one of the members of the firm who operate the Baldwin locomotive works; it was the last engine delivered and that is the reason I remember it so clearly. It was brought to Richmond as freight, put together by the Baldwin expert, went out on its trial trip, when the steam was thoroughly tested by myself, being put to the regular working pressure, and performed perfectly satisfactorily. The engine ran about seven thousand miles on the Richmond and Danville division before it came to Atlanta, which was in October, 1886; it was doing regular freight service before it came to Atlanta. I have been connected with railroads as a mechanic since 1879; before that time I was receiving my education and training. I am intimately acquainted with boilers and steam-engines, and, in my opinion as an expert, safety and prudent management does not require that a new engine just purchased from reputable manufacturers should be stripped and taken to pieces and examined for defects in the material of its construction, neither is it customary. If we suspicioned one part I do not see why we should not suspicion the balance, and our duty would be to take it all to pieces. If the railroads have to take the engine when purchased to pieces they might as well make them. If the engine were taken to pieces when bought from reputable manufacturers it would not be possible for the crude force employed by the railroads to put it together as well as it could be done by the locomotive works, for the reason that the works have trained men for this special purpose and improved ma-

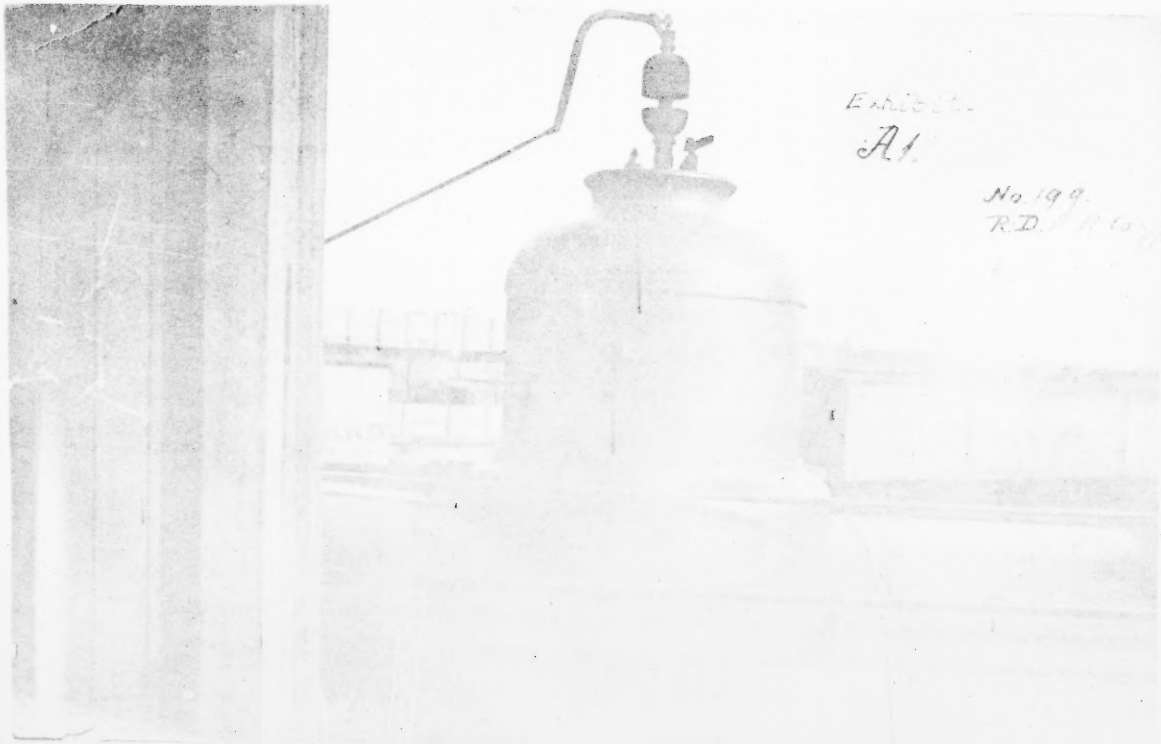


Exhibit
A1

No. 199
R.D.

chinery. Engine No 515, which exploded, had two injectors, each gauge being enough to supply the boiler, and if one injector should fail the other would be more than enough to take its place and supply the engine. At that time these locomotives were loaded at a working pressure of 145 pounds; since that time we have increased it to 150 pounds, which is a perfectly safe pressure. It is in evidence that the locomotive works used a water test of 180 pounds on this boiler, which I will explain:

The boilers are filled with water and a pump is applied to increase the pressure, which is then raised to twenty-five pounds above what is supposed to be the working pressure of the engine. For instance, if the engine is to use 125 pounds the hydraulic test would be 150 pounds. There is no reason for doubting that the strain thus brought to bear is as great as that produced by steam. If it stood a water pressure of 180 pounds there is no reason why the same boiler should not stand the steam pressure of 180 pounds. The reason for the use of the hydraulic test is that there is no danger of explosion.

Cross-examination:

It is possible to remove the throttle seat and — can be done; it is done when necessary, if that means practicable. I was present on the trial trip of the locomotive and my recollection is that the working pressure was 145 pounds, which was the working at that time.

Redirect:

There are two pop-valves on each engine; they are both set at the same pressure or within two or three pounds of each other; if one gets stuck the other is working. They are separate, distinct, and one of them is sufficient.

Defendant then introduced as evidence the diagram annexed to the interrogatories as follows:

(See diagram marked p. 14.)

Defendant tendered in evidence three photographs marked as Exhibits A1, A2, and A3.

(Here follow photographs marked pp. 102, 103, & 104.)

Defendant tendered in evidence the dome casting, dome cap, and dome ring identified as being that of engine No. 515, a drawing of which is substituted by consent, the red line showing where the fracture was, it being impossible to embrace in these exceptions the dome casting, dome cap, and dome ring, which

sp[illegible]igh about one thousand pounds.

wc[illegible] to l.

care (Here follows diagram marked p. 101.)

vhic[illegible]timony closed and defendant requested the court to charge the

Tes[illegible]fairs follows:

jury as[illegible]fendIn this case he undisputed fact exists that the engine and

1st. [illegible]ase, n question were purchased from the Baldwin locomotive

boiler [illegible]—199

9

works, builders of established good character and reputation; that when completed and tendered to the defendant company its machinery was put in order in the presence of the agents of defendant by an agent of the builder sent out with it for that purpose, and then by that agent, along with the agent of defendant, was taken out on the road on a trial trip, the steam being raised to the regular running pressure; that test was satisfactory, and after it was made the locomotive was accepted by the defendant.

This was in June, 1886. It ran nearly seven thousand miles on one division of defendant's road between this time and the following October. It was then brought to the Atlanta and Charlotte division and ran until the 26th of November, 1886, when it exploded while standing on a side track in the defendant's yard at Atlanta. It is now known that this explosion was caused by a defect in the material of which a certain casting was made which formed a part of the boiler. This casting when the engine was completed and delivered to the defendant was covered by several casings, which are usual parts of such an engine, and which completely concealed the defect. It appears also that it was in part, if not entirely, concealed, even if these casings or coverings had been removed, by the lap of the boiler plates, and there is evidence
106 showing that it could not have been seen even if the casings had been removed. So far as the evidence discloses, no indications of the existence of this defect had ever appeared. It was a latent defect, and, in my opinion, it has not been established by sufficient evidence, that it could have been discovered by the defendant by the exercise of ordinary and reasonable care and diligence, such as the law would require under the circumstances of this case. I do not think, therefore, that the defendant has been shown to have been guilty of negligence in procuring, in the first instance, or in having in its use and upon its premises the engine in question."

Which charge the court refused to give, and the defendant then and there excepted, and the exception was duly noted by the court.

2nd. Nor do I think that it has been established by sufficient evidence that the defendant has been guilty of negligence in handling and managing the engine. There is some evidence by the witness Lewis that what is termed the pop-valve, which I take to be the safety valve, and what he called the right-hand pump, were not in order. I understand him to refer by the word "pump" to the appliance used for forcing water into the boiler; but this witness stated at the same time that the pump was "worked on" by defendant's mechanic, and he also admitted that he, Lewis, had not sufficient experience to say that this condition would have caused the explosion; but the evidence of the mechanics who know this engine is positive that there was no such thing as a pump on it for forcing water in the boiler. This was done on this engine by an appliance known as an injector, and all the witnesses who were examined on that subject state positively that the pop-valve and injector was in good working order, and these witnesses were experts who had handled the engine the evening of the accident;

107 but even if the evidence of Lewis as to the pop-valve and the right-hand pump being out of order were uncontradicted, it would not, in my opinion, be sufficient alone to show negligence, for this reason, the evidence is uncontradicted that both of these parts of the engine—that is, the pop-valve and the injector—are in duplicate, and that either one is sufficient without the other, or in case of defect in the other, and would do the work necessary for safe operation. There was also some evidence that there was an escape of steam, which some witnesses called the "fretting" of the pop-valve and others called it by different names. But I think that this circumstance is fully explained by one of the plaintiff's witnesses, Mr. Krogg, and by the other witnesses and facts in the case. It appears from Mr. Krogg's testimony that this occurs when the steam is almost up to the pressure at which it is set to escape or pop-off, and that it also occurs when the valve is screwed down sideways or one side lower than the other, and that in neither of these cases is there any danger of an explosion from this cause; indeed, the evidence tends to show that this being an escape of steam would lessen the pressure and therefore diminish the danger.

Which charge the court refused to give, and the defendant then and there excepted, and the exception was duly noted by the court.

3rd. I conclude therefore that the evidence given at this trial, with all the inferences that a jury could justifiably draw from it, is insufficient to support a verdict for the plaintiff. Under the law, therefore, I think it is my duty to instruct you to return a verdict for the defendant.

Which charge the court refused to give and the defendant then and there excepted, and the exception was duly noted by the court.

The court then charged the jury as follows:

Charge of the Court.

108 GENTLEMEN OF THE JURY:

In this case, gentlemen, it is conceded that the plaintiff sustained an injury, resulting in the amputation and loss of a leg by reason of an explosion of an engine called No. 513 of the R. R. Co. and 515 of the manufacturing company, and that he was free from fault in the bringing about of the occurrence which resulted in the injury to himself.

It is said on behalf of the plaintiff that this injury was caused by the negligence of the defendant. It would be necessary for this to be so in order that the plaintiff be entitled to recover. The law, in the judgment of the court, holds the defendant to reasonable and ordinary care and diligence in respect to this transaction and in respect to the engine and locomotive the explosion of which is said to have caused the injury to the plaintiff. Reasonable and ordinary care and diligence is said *to be* the law to be that degree of care which every prudent man exercises in the management of his own affairs of a like kind; that is the rule of diligence to which the defendant is held. This applies in this case as well *as* to the purchase, inspection, and examination of the locomotive as to the

management and conduct of it after it came into their possession and control.

The plaintiff says the defendant is guilty of negligence in two respects: first, they say that in the management of the engine or locomotive the defendant was negligent; then they say, whether that be true or not, that it was negligent in not having made a sufficient inspection and examination of the engine to see if any defects existed which would be liable to cause such an occurrence as that which did happen. They say, in the first place, that the pump, otherwise called the injector of the engine, was out of order,
109 and that it failed to do properly the work to which it was assigned and which it ought to have done, and this negligence caused the injury. They say, in the next place, that the engine was allowed to carry and generate more steam than it was capacitated to carry, and that brought about the injury. They say, in the next place, that the safety valve, called the pop-valve, was out of order, and that contributed to or caused the injury. Now, gentlemen of the jury, in respect to all these matters the rule is the one I have given you—that is, in respect to the management of all these matters it was the duty of the railroad company, through its servants and employees, to exercise reasonable and ordinary care and diligence. The jury should take each of these branches of the case, these three subdivisions of the first alleged ground of negligence, and see what conclusion you reach. There has been some evidence in the case by the plaintiff which they say tends to show that this pump or injector, as it was called, was out of order. The defendant introduces some witness who say it was not out of order; that it was in good working order. The evidence for the plaintiff, as I understand it, is based upon the statement of a man presumed to be the man who was afterwards put upon the stand by the defendant, Mr. Cumbea, who says here that the injector was not out of order; that he put some stuffing, I believe he calls it, into and around the injector, and found he had it in wrong and afterwards took it out and put it in right, and that it afterwards worked all right. It is said, also, in reply to this by the defendant, that if this pump failed to work, if it failed to supply a sufficient quantity of water for the boiler, and if the engine had exploded on account of such insufficiency of water in the boiler this would have been shown by signs after it exploded. Mr. Collier, the master machinist of the Western & Atlantic railroad, testified that that would be
110 true, and Mr. Gibbs says that there were no such signs, and therefore, the defendant says, this ground of negligence is not true and did not exist. They say they have shown by the man who the plaintiff claimed said it was out of order that it was working well, and that it was not out of order, and then, in addition, that the absence of the lines around the boiler corroborates it. You are to take this evidence, gentlemen, and see what you think is the truth of that. So, with regard to the excess of steam, they say there was an excess of steam; that the gauge indicated that the boiler was carrying more steam than the valve was set for and more than ought to have been in the boiler or in the engine. You take the evidence

on the subject and determine what you believe is the truth about that. See whether or not the engine had more steam than ordinary care and prudence in the management of the engine would authorize it to carry—justified it in carrying. So, also, as to the valve called the safety valve or the pop-valve. As I understand the evidence, there is no direct evidence—that is, there is no witness who says he saw this valve out of order. The plaintiff says that from the evidence of these witnesses who swore that the valve was making a kind of a noise like fretting or fluttering, that from that evidence they are justified in saying so, and then the evidence of the witness who say- it seemed to be stuck, and perhaps there is another witness, that they are justified in saying that it was out of order. The reply the defendant makes to that is that this noise which the witnesses say the valve was making was caused by its not quite reaching the point where the popping off, as they speak of it, would occur, and that that was the natural and probable thing to occur, and that there was no danger in it. The jury will take all this evidence and see what they believe is the truth of it.

If you believe that in either respect *that* the machinery was
111 defective, and that the defects were known or should have been know- to the defendant's servants or agents by the exercise of ordinary care, and that these defects were the cause of the explosion, you would be authorized, so far as that branch of the case is concerned, to find for the plaintiff and find the defendant guilty of negligence. See what you think is the truth as to that, giving the evidence of all the witnesses the consideration you think it should have. See how much weight the testimony of each should have and see what you believe is the truth about the matter. See whether or not in either of the respects I have named the defendant failed to exercise reasonable and ordinary care and diligence in the management of the locomotive.

The plaintiff says, in the next place, that this machinery—this piece of machinery—(referring to dome ring) was defective; that a portion of it was. It seems to be conceded by all the witnesses who have testified on the stand that this piece of iron, which, I believe, is called the dome ring, had a defect in it, was defective in the original construction of it in the moulding.

The defendant says, in the first place, that it bought the locomotive from makers who are reputable and first-class manufacturers of engines of this kind. They say, also, that they could not by the exercise of ordinary care and diligence have discovered the defect in this piece of iron or dome ring. They say when they received it they put the engine to the proper test—all the tests that were required—all the tests that due care and prudence on their part required them to use. Now, the question for you to determine on this branch of the case is whether they did so or not. In the judgement of the court, it is incumbent on the defendant to exercise for itself due care in the inspection and examination of these engines.

112 While the facts of the purchase of the engine from the men they did, from men who are testified to have been reputable and first-class manufacturers, is a fact that goes to the jury for you

to consider and for you to give it all the weight you think it should have, the court is of the opinion that it is incumbent on the defendant to exercise due care and diligence on its part in making such inspection and examination of the engine as the safety of persons who are to come near and in contact with it would require under all the circumstances of the case. Now, it is for you to say, gentlemen of the jury, whether or not, under the proof, they have made such examination and whether or not any other examination of the engine and other inspection they may have made was practicable and necessary in the exercise of reasonable care and prudence on their part; see whether or not, if they should have done so, how far you think they should have gone in that respect; see whether or not, — they have exercised such degree of care as you think they ought to have exercised, they would have discovered these defects. It is said on behalf of the defendant, and it seems to be conceded by all the witnesses who have been on the stand, that this piece of iron was covered by three different kinds of covering—I believe it was three—you will remember about that—and that it was so covered so as to be hidden from observation from the outside, and that in order for them to have discovered the defect from the outside it would have been necessary for them to have removed all of the covering on the outside of this piece of iron. It does not seem to me—I will leave this to the jury, but it does not seem to me—that due care and prudence on the part of the railroad company would require that to have been done—to have removed all of these coverings to see it, so far as that portion of it is concerned. It is said, however,
113 that this defect could have been discovered from the inside. You have heard the evidence and argument of counsel about that, as to whether or not this defect could have been discovered from the inside and whether or not reasonable care and prudence on the part of the defendant would require it to examine it on the inside. This is for you to say, under all the facts and circumstances of the case. The defendant says that for them to examine this piece of iron they may as well be required to examine the whole of the boiler and take the whole thing to pieces. That is a matter for you to say, about how far due care and prudence would require them to make an examination and to what that examination would have led them. After all, gentlemen, the whole of the question is a question for you. Take all the facts and circumstances, take all the evidence and give it a fair consideration, and see whether or not this defendant has exercised due care and prudence, in the first place, in the ownership of this engine, in the way it came into their possession and use, and, in the next place, in the management and control of it after they had it.

If you believe, after having given the evidence a fair consideration, that this defendant was guilty of negligence in either of the respects I have named, and you further believe that that negligence was the cause of the explosion, the plaintiff in this case would be entitled to recover. If, on the other hand, you do not believe that the defendant has been guilty of negligence, you do not believe it has failed to exercise ordinary care and prudence in these respects,

then the plaintiff would not be entitled to recover and you would find for the defendant. You take the evidence, now, gentlemen, and give it a fair consideration. In civil cases you are controlled by the preponderance of the evidence. I say that especially because you have been engaged in the trial of criminal cases and the
114 rule there is otherwise. You are controlled in civil cases by the preponderance of the evidence. You will see where any conflict in the evidence is, and you are to decide what is the preponderance of the evidence, which witness is to be believed, and what is the truth of the case. If there should be a conflict in the evidence, it is the duty of the jury to reconcile it if they can and try to make all the witnesses speak the truth. If the conflict is irreconcilable, the jury must take the relationship of the parties to the case, the means they have for knowing the truth of what they testify and their probable motive or lack of motive for misrepresenting it, their manner of testifying on the stand in the case, the matter of their testimony, and see which of the witnesses and what part of the evidence you believe. The jury are the sole judges of the facts, and while the court has commented upon the facts of the case, it is simply the comment of the court. As to the truth of the matter, it is for you to determine by all the testimony of the case. See what the truth is, and as you believe so you will find.

If you do not believe, of course, that the plaintiff is entitled to recover, you wil- simply end your labors and say, "We, the jury, find for the defendant." If you believe the plaintiff is entitled to recover, it would be necessary for you to go further and see what the plaintiff in entitled to recover. The plaintiff would be entitled to recover, if entitled to recover at all, in the first place, the physician and surgeon bills. This is testified to be three hundred dol-ars. He would be entitled, in the next place, to recover for the pain and suffering he has endured, which he now endures, and which, in the opinion of the jury, he may endure in the future. There is no rule for the court to give you as to how much the plaintiff is entitled to recover for
115 pain and suffering. It is left to your conscience, to your enlightenment, to your judgment, and to your impartiality; it is for the jury to say, taking a fair and just view of the evidence in all respects, as to how much for this pain and suffering the plaintiff is entitled to recover. In this connection the jury are authorized to consider the fact that the man has lost a leg, considered as a disfigurement—take that into consideration. Take this matter and give it a fair consideration; it is left to your enlightened conscience. See what you believe he is entitled to recover under this head, and then add it to the three hundred dollars. The plaintiff would be entitled to recover for what the accident has caused him pecuniary or financial loss—that is, the loss of his capacity to labor and earn money. The evidence shows very clearly that he has lost a leg at what the physicians call "upper third;" the jury saw where his leg is off. All the evidence on the subject is that he was earning forty-five dollars a month. I permitted some evidence to be introduced on the subject of the line of promotion in the business in which he was engaged. The plaintiff says, and the jury could consider the

fact, that he had a probability of promotion *of* the line of services in which he was engaged; that the salary of the next grade of services in which he was engaged is from sixty to seventy-five dollars per month; the jury can consider that in finding what his financial or pecuniary loss is. I have permitted the evidence to go to the jury and I will state to you that the jury ought not — be governed by a mere conjecture or possibility in a matter of that sort; it ought to be shown to the reasonable satisfaction of the jury that the man after awhile would earn more money than he was then earning; it ought to be shown to your reasonable satisfaction; it is a matter for you to determine. The evidence has gone to you, and if you
116 believe, if it has been shown to your reasonable satisfaction, that this man would earn more money at some future period, you would be authorized to consider that fact. It is a matter, after all, for the jury to say how much the man shall recover. Some tables has been offered in evidence, and those tables the jury may consider if they see proper; they are competent evidence for you to consider so far as you think you ought to consider them. In connection with the tables, the jury would be authorized to consider the exigencies of human life, the nature of the services in which the plaintiff was engaged, and the fact that as he increases in years his capacity to earn money would decrease when he got older. All of those matters are for the jury to consider in connection with these tables, if you see proper to consider them, the object of the jury being to compensate the plaintiff in this case for the loss of capacity to earn money. There is one ta*l*be you will find which will show you what the probability of a human life is—how long the plaintiff will probable live; it is a proper table for you if you wish to consider —. The table is said to — made up of a great many lives, the average of human life; that is a proper thing for you to consider if you desire to do so. There is another table, called the annuity table; you will find opposite the age some figures by which you may multiply if you wish the amount per annum which you think the plaintiff should have; that would be one way of arriving at the financial loss of the plaintiff, if you see proper to do so. You will see the table there and it is necessary to explain it no further. The plaintiff says that he should recover for the whole of the amount that the jury believes he would be able to earn if he was a sound man. In other words, that he is wholly incapacitated to labor now. It
117 is for you to say, gentlemen, what you think his capacity to labor has been lessened by this accident. It seems to me that a man, although injured as he is, would have some capacity left to labor; it has seemed to me that way all through the case. I do not pretend to say to what extent; I do not mean to tell you to what extent; it is for you to say; but it seems to me that the man would have some capacity to earn money. It might be to a slight extent, but to what extent it would be a matter for you to say. It is for you to compensate him for what the loss of his capacity to labor and earn money is.

Now, you take the case, gentlemen, and say what the truth is as to that. See what you believe the plaintiff is entitled to recover, if

you believe that he is entitled to recover at all. Upon that, of course, the court expresses no opinion whatever. Take this amount gentlemen, the three hundred dollars, about which there is no contention, and the amount you may give him for pain and suffering and the amount for pecuniary or financial loss and find them all in one sum. The jury may, in their discretion, if they see proper to do so, on the amount, if you find any amount, add interest from the 25th of November, 1886. That is in your discretion. You can do so, if you see proper, from that time to the present time. Whatever you find and all you find you will find in one round sum. The jury will find a verdict for so many dollars, and let it be signed by your foreman. If you do not find that the plaintiff is entitled to recover at all, you will say, "We, the jury, find for the defendant."

Gentlemen, as to the stripping off the outside of this piece of iron, the dome ring, I will state to you, in the opinion of the court, that due care and prudence on the part of the defendant would not require them to take the casing from around the ring. That is the impression of the court on the facts. It is for you to de-
118 termine; but, in the opinion and judgment of the court under all the proof, it would not require the company to take that casing from the outside of it.

I am reminded that I failed to call the jury's attention to the rate of interest. If you find interest from the time the accident occurred, the rate is 7 per cent., the legal rate in Georgia.

You may retire, gentlemen, and make your verdict.

I certify that the foregoing bill of exceptions is true, and contains all the evidence material to a clear understanding of the errors complained of. The clerk of this court will enter the same of record, and transmit the same, with a full transcript of the record in this case, to the next term of the Supreme Court of the United States, in order that the errors complained of may be corrected.

The exceptions hereinbefore contained were duly made in open court during the trial of the above-stated case, and were then and there noted by the court, and this certificate is given *nunc pro tunc* during the term of the court at which the trial was had.

January 2, 1889.

WM. T. NEWMAN,
Judge U. S. Circuit Court for Northern District of Georgia.

Service of the within bill of exceptions acknowledged, copy, notice, and all further service waived, this Jan'y 2nd, 1889.

GARTRELL & LADSON,
T. P. WESTMORELAND,
Plaintiff's Att'y.

Filed in clerk's office 2d day of January, 1889.

A. E. BUCK, *Clerk,*
By O. C. FULLER, *Deputy Clerk.*

119 *Assignment of Errors.*

In the Circuit Court of the United States for the Northern District of Georgia.

HENRY ELLIOTT, Plaintiff,
vs.
THE RICHMOND & DANVILLE RAILROAD COMPANY, Defendant. } Action for Damages.

And now comes the Richmond and Danville Railroad Company and assigns error upon each of the exceptions taken upon the trial of the above stated case, as follows:

1st. Said defendant says that the court erred in admitting the testimony, to which objection was made, in reference to the possible promotion of plaintiff, the said testimony being as follows:

Q. Who was your superior officer at the time you were hurt?
A. Mr. Schmidt.
Q. I mean just above you in control of that train.
A. Mr. Burnett.
Q. What was he?
A. He was my conductor.
Q. You state that Mr. Burnett was your conductor and the officer immediately in charge?
A. Yes, sir.
Q. State your grounds for believing that you would acquire a position as yard conductor, such as Mr. Burnett had. What is the next grade of officer after the coupler, such as you were?
A. Conductor.

(By the COURT:)

Q. Where is the brakeman—where does he come in?
A. The head coupler and the switchman—a man who minds switches; does not have much to do with switching the cars. He does whatever the coupler says.

(By Mr. LADSON:)

Q. Just state to the jury what position you had reason to believe that you would acquire in rising, and state why you think so.
A. Well, I think so by staying there. I stayed there and served my time out first. I filled several men's places there.
120 Q. What places?
—. I filled Mr. Banks' place, my yardmaster.
Q. State that so the jury can understand it.
A. Mr. Banks would be out and I would go and take his bills and draw them off on a slip of paper; go out and get the cars and draw the numbers off and give them to the yardmaster in the office.
Q. You have at time- discharged the duties of yard conductor?
A. Yes, sir.

Q. You said something about serving your time out.

A. There is a system by which you go in there as coupler or train hand or in the yard, and if a man falls out you stand a chance of taking his place.

Q. What salary does the average yard conductor obtain?

A. They get from sixty to seventy-five dollars a month.

To all of this testimony in reference to the possible promotion of plaintiff the defendant objected, and on the objection being overruled an exception was then and there duly noted by the court.

2nd. Said defendant says that the court erred in overruling the objection made by this defendant to the depositions of W. M. Lewis. The ground of the objection taken was that the witness was present in court under a subpœna, and therefore the depositions made by him in answer to interrogatories *was* inadmissible.

An exception to the ruling of the court was then and there entered.

3rd. Said defendant says that the court erred in admitting the evidence of E. W. Burnett, over objection, as to the custom regarding the promotion of car-couplers in railroad yards. The question and answer to which objection was made were as follows:

Q. What was the custom regarding the promotion of couplers in railroad yards?

A. The next step from where he was at the time he got hurt would have been to have charge of an engine—what we call
121 a yard conductor.

To this ruling an exception was then and there entered.

4th. The defendant says that the court erred in sustaining the objection of plaintiff to the record of a suit brought by attachment against the Baldwin locomotive works in favor of Henry Elliott, the declaration in said suit claiming twenty thousand dollars damages for the same injuries as are sued for in this case. So far as material, the allegations in said declaration were as follows:

"Your petitioner shows that said explosion of said engine was due to its unskillful, improper, and defective condition. Said defects consisted in the dome of said engine being unskillfully and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode. Said engine was defectively constructed in other respects, to wit: The dome casting was full of flaws, the same was not securely and properly riveted to the dome proper, and there was a large crack or flaw in the dome casting or cap near where it was riveted to the dome. Said dome casting was of infirm material, unskillfully made, and unfit for the use intended.

"This plaintiff further shows that said defendants are engaged in the business of manufacturing and selling locomotives in the State of Pennsylvania; that they manufactured and constructed the engine which exploded aforesaid, and disposed of the same to the Richmond and Danville Railroad Company to be used by said

company on its road at Atlanta and at other points on said company's line of railroad. Said explosion occurred but a short time after said defendants sold said engine to said company.

"That said defects which caused said explosion existed at and during the time said engine was being constructed, and that said defendants knew or could by the exercise of ordinary dili-
122 gence have discovered said defects, and that they were guilty of gross and criminal negligence in so defectively constructing said engine.

"That said defendants knew that said engine was a powerful and, being improperly constructed, a very dangerous machine; they knew that the same was intended to be used on the public highways and other places where the people lawfully met to transact business, and that — an explosion of said engine would follow death or injury to some person or persons.

"That said defendants concealed said defects from said railroad company and falsely represented to said company that said engine was safely and properly constructed, thereby deceiving said railroad company. Said action of said defendants in so sending forth said defective, dangerous, and infirm machine to be used by said company as aforesaid was wrongful and productive of imminent danger to the person and lives of others, as witness the injury to petitioner, as above related: was a violation of law and of their duties and obligations in that regard, for which wrong and damage they, the said defendants, are answerable to this plaintiff—the law imposing upon said defendants, as builders of ponderous, powerful, and dangerous machinery, which they knew — intended to be used in the public marts and on the highways, where the people meet and lawfully assemble (the improper and defective construction of which will likely and naturally endanger the person and lives of others), the duty to carefully and skillfully construct the same."

To this evidence the plaintiff objected, on the ground that it was not germane to the case before the court, as it was *res inter alios acta*. The objection was sustained and the evidence excluded. An exception was then and there entered by the court.

5th. The defendant says the court erred in sustaining the objection made by the plaintiff to the record aforesaid, including
123 the demurrer filed to said declaration by said Baldwin locomotive works, upon the ground "that the matters and things alleged in plaintiff's declaration are not sufficient in law, and that no cause of action appears against these defendants in the statements of said declaration."

Also the judgement of the court overruling said demurrer in the following language: "After hearing argument on the within demurrer, it is ordered that the same be overruled."

To this *objection* the same objection was made by the plaintiff and sustained by the court. An exception to this ruling was then and there entered.

6th. The defendant says the court erred in refusing to charge the jury as requested in writing as follows:

"In this case the undisputed facts exist that the engine and boiler in question were purchased from the Baldwin locomotive works, builders of established good character and reputation; that when completed and tendered to the defendant company its machinery was put in order in the presence of the agents of the defendant by an agent of the builder sent out with it for that purpose, and then by that agent, along with the agents of the defendant, was taken out on the road on a trial trip, the steam raised to the regular running pressure; that test was satisfactory, and after it was made the locomotive was accepted by the defendant. This was in June, 1885. It ran nearly seven thousand miles on one division on defendant's road between this time and the following October. It was then brought to the Atlanta and Charlotte division and ran until the 26th of November, 1886, when it exploded whilst standing on a side track in the defendant's yard at Atlanta. It is now known that the explosion was caused by a defect in the material of which a certain casting was made, which formed a part of the boiler. This casting, when the engine was completed and delivered to the
124 defendant, was covered by several casings, which are usual parts of such an engine and which completely concealed the defect. It appears also that it was in part, if not entirely, concealed, even if these casings or coverings had been removed, by the lap of the boiler plates, and there is evidence showing that it could not have been seen even if the casings had been removed. So far as the evidence discloses, no indications of the existence of this defect had ever appeared. It was a latent defect, and, in my opinion, it has never been established by sufficient evidence that it could have been discovered by the defendant by the exercise of ordinary and reasonable care and diligence, such as the law would require under the circumstances in this case. I do not think, therefore, that the defendant has been shown to have been guilty of negligence in procuring in the first instance or in having — its use and upon its premises the engine in question."

Which charge the court refused to give, and the defendant then and there asked that an exception be noted by the court, which was done.

7th. The defendant says the court erred in refusing to charge the jury as requested in writing as follows:

"Nor do I think that it has been established by sufficient evidence that the defendant has been guilty of negligence in handling and managing the engine. There is some evidence by the witness Lewis that what is termed the pop valve, which I take to be the safety valve, and what he called the right-hand pump, were not in order. I understand him to refer by the word "pump" to the appliance used for forcing water into the boiler; but this witness stated at the same time that the pump was "worked on" by defendant's machinist, and he also admitted that he, Lewis, had not sufficient experience to say that this con-
125 dition would have caused the explosion, but the evidence of the machinists who know this engine is positive that there

was no such thing as a pump on it for forcing water into the boiler this was done on this engine by an appliance known as an injector, and all the witnesses who were examined upon that subject state positively that the pop-valve and injector were in good working order, and these witnesses were experts who had handled the engine the evening of the accident; but even if the evidence of Lewis as to the pop-valve and the right-hand pump being out of order were uncontradicted it would not, in my opinion, be sufficient alone to show negligence, for this reason, the evidence is uncontradicted that both of these parts of the engine—that is, the pop-valve and the injector—are in duplicate and that either one is sufficient without the other or in case of defect in the other and would do the work necessary for safe operation. There was also some evidence that there was an escape of steam, which some witnesses called the "fretting" of the pop-valve and others called it by different names, but I think that this circumstance is fully explained by one of the plaintiff's witnesses, Mr. Krogg, and by thy other witnesses and the facts in the case. It appears from Mr. Krogg's testimony that this occurs when the steam is almost up to the pressure at which it is set to escape or pop off, and that it also occurs when the valve is screwed down sidewise or one side lower than the other, and that in neither of these cases is there any danger of an explosion from this cause. Indeed, the evidence tends to show that this being an escape of steam would lessen the pressure and therefore diminish the danger."

Which charge the court refused to give, and the defendant then and there asked that an exception be noted by the court, which was done.

8th. The defendant says that the court erred in refusing to
126 charge the jury as requested in writing as follows:

"I conclude, therefore, that the evidence given in this trial, with all the inferences that a jury could justifiably draw from it, is insufficient to support a verdict for the plaintiff. Under the law, therefore, I think it is my duty, to instruct you to return a verdict for the defendant."

Which charge the court refused to give, and the defendant then and there asked that an exception be noted by the court, which was done.

The defendant assigns error upon each of the grounds aforesaid.

POPE BARROW,
HENRY JACKSON,
Of Counsel for Defendant.

Filed in clerk's office 2 day of Jan'y, 1889.

A. E. BUCK, *Clerk*,
By O. C. FULLER,
Deputy Clerk.

Supersedeas.

Circuit Court of the United States, Northern District of Georgia.

Whereas lately in this court in a cause between Henry Elliott, plaintiff, and The Richmond and Danville Railroad Company, defendant, a verdict was returned in favor of the said plaintiff for the the sum of ten thousand dollars, to wit, on the second day of November, in the year eighteen hundred and eighty-eight, and thereafter, to wit, on the nineteenth day of the same month, judgment was rendered by the court for the amount aforesaid, interest and costs, and the aforesaid defendant, with sufficient security, has
127 this day filed its bond in error, approved by the Hon. Wm. T. Newman, the judge presiding in said court, so as to operate as a supersedeas; and the said defendant having sued out a writ of error in due form and time and a citation having been regularly taken and served upon the plaintiff and duly returned:

Therefore, on consideration of the premises, it is here ordered by this court that a supersedeas be allowed and the judgment aforesaid suspended pending the hearing of this cause on writ of error to the Supreme Court of the United States, and that no execution or other process issue for the enforcement of the same until said cause shall have been finally determined.

This January 2nd, 1889.

WM. T. NEWMAN,
Judge Circuit Court United States, Northern District Georgia.

Filed in clerk's office 2d day of Jan'y, 1889.

A. E. BUCK, *Clerk,*
By O. C. FULLER,
Deputy Clerk.

128 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the honorable the judge of the circuit court of the United States for the northern district of Georgia, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said circuit court, before you or some of you, between Henry Elliott, plaintiff, and The Richmond and Danville Railroad Company, defendant, a manifest error hath happened, to the great damage of the said The Richmond and Danville Railroad Company, as by its complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the second Monday of October next, in the said Supreme Court to be then and there held, that,

the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws and customs of the United States should be done.

Witness the Honorable Melville W. Fuller, Chief Justice [L. S.] of the said Supreme Court, the second day of January, in the year of our Lord one thousand eight hundred and eighty-nine.

A. E. BUCK,
Clerk of the Circuit Court of the United States, Northern Dist. of Ga.

Allowed by—
WM. T. NEWMAN, *U. S. Judge.*

129 [Endorsed:] Filed in clerk's office 2 day of Jan'y, 1889. A. E. Buck, clerk, by O. C. Fuller, dep. clerk.

Service of a copy of the within writ of error acknowledged; all further notice and service waived.
This January 2d, 1889.

GARTRELL & LADSON,
T. P. WESTMORELAND,
Plaintiff's Att'ys.

130 Know all men by these presents that we, The Richmond and Danville Railroad Company, as principal, and Albert E. Thornton, as surety, are held and firmly bound unto Henry Elliott in the full and just sum of twenty thousand dollars, to be paid to the said Henry Elliott, his certain attorney, executors, administrators, or assigns; to which payment, well and truly to be made, we bind ourselves, our heirs, executors, and administrators, jointly and severally, by these presents.

Sealed with our seals and dated this second day of January, in the year of our Lord one thousand eight hundred and eighty-nine.

Whereas lately at a session of the circuit court of the United States in and for the northern district of Georgia in a suit depending in said court between Henry Elliott, plaintiff, and The Richmond and Danville Railroad Company, defendant, a judgment was rendered against the said The Richmond and Danville Railroad Company, and the said The Richmond and Danville Railroad Company having obtained a writ of error and filed a copy thereof in the clerk's office of the said court to reverse the judgment in the aforesaid suit and a citation directed to the said Henry Elliott citing and admonishing him to be and appear at a Supreme Court of the United States to be holden at Washington on the second Monday of October next:

Now, the condition of the above obligation is such that if the said The Richmond and Danville Railroad Company shall prosecute said writ of error to effect and answer all damages and costs if it fail to

make its plea good, then the above obligation to be void; else to remain in full force and virtue.

THE RICHMOND & DANVILLE RAILROAD COMPANY, [SEAL.]
By its attorney-at-law, HENRY JACKSON. [SEAL.]
A. E. THORNTON. [SEAL.]

Sealed and delivered in presence of—
H. R. BLOODWORTH.
N. P. F. Co., Ga.

Approved by—
WM. T. NEWMAN, *U. S. Judge.*

131 [Endorsed:] Filed in clerk's office 2d day of January, 1889.
A. E. Buck, clerk, by O. C. Fuller, deputy clerk.

132 The United States of America to Henry Elliott, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, to be holden at Washington on the second Monday of October next, pursuant to a writ of error filed in the clerk's office of the circuit court of the United States for the northern district of Georgia, wherein The Richmond and Danville Railroad Company is plaintiff in error and you are defendant in error, to show cause, if any there be, why the verdict and judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable William T. Newman, judge of the district court of the United States, presiding in and holding the circuit court of the United States for the northern district of Georgia, this second day of January, in the year of our Lord one thousand eight hundred and eighty-nine.

[L. S.] WM. T. NEWMAN,
U. S. Judge.

133 [Endorsed:] Filed in clerk's office 2d day of January, 1889.
A. E. Buck, clerk, by O. C. Fuller, deputy clerk.

Service of a copy of the within citation acknowledged; all further notice and service waived this January 2d, 1889.

GARTRELL & LADSON,
T. P. WESTMORELAND,
Plaintiff's Att'ys.

134 UNITED STATES OF AMERICA, } ss:
Northern District of Ga., }

I, A. E. Buck, clerk of the United States circuit court in and for the northern district of Georgia, do hereby certify that the foregoing printing and writing is a true, full, correct, and complete transcript

of all the proceedings on file and remaining of record in my office in the matter of Henry Elliott *vs.* The Richmond and Danville Railroad Company.

In testimony whereof I hereunto set my my hand and seal of the said circuit court, at Atlanta, Ga., this the 16th day of August, A. D. 1889.

Seal U. S. Circuit Court, N. D. Georgia.

A. E. BUCK, *Clerk.*

Endorsed on cover: Case No. 13,793. N. Georgia C. C. U. S. No. 199. The Richmond and Danville Railroad Company, plaintiff in error, *vs.* Henry Elliott. Filed October 17, 1889.

149 U S 266

No. 199.

Office Supreme Court U. S.
FILED.
MAR 30 1893
JAMES H. McKENNEY,
CLERK.

Supreme Court of the United States,

October Term, 1892.

THE RICHMOND & DANVILLE R. R. CO.,
Plaintiff in Error,

vs.

HENRY ELLIOTT, Defendant in Error.

BRIEF.

JACKSON & JACKSON, T. J. LEFTWICH,
Counsel for Plaintiff in Error.

FRANKLIN PUBLISHING HOUSE,
Atlanta, Ga.
1893.

THE RICHMOND AND DANVILLE RAILROAD CO., Plaintiff in Error, *vs.* HENRY ELLIOTT.	No. 199. Supreme Court of the United States, October Term, 1892.

This is a writ of error to the Circuit Court of the United States, for the Northern District of Georgia, from a judgment for $10,000.00 damages for personal injuries.

It was claimed by the plaintiff in the court below that, on the night of the 26th of November, 1886, he was coupling cars for the Central Railroad Company in the Airline yard, in the city of Atlanta, Georgia, when an engine exploded in the yard, just below Oakland cemetery, about Elsas & May's factory. The engine belonged to the Richmond and Danville Railroad Company, and the plaintiff was standing about one hundred feet from the locomotive. The plaintiff had been connected with the Central Railroad for four or five years, and alleges in his declaration that the exploded engine was standing still and making a noise known as "popping off." He further claims that he had an opportunity to notice the "popping off" of the pop-cock, and offers evidence to show that a piece of the exploded boiler struck him, and that he lost a leg in consequence of the accident. No question of contributory negligence, or want of care on the part of plaintiff, was raised upon the trial, nor is any such question presented by this record. It is conceded that the leg of the plaintiff was amputated as a result of the accident; that he was confined to his bed about six weeks; that he suffered a great deal; and that he was treated by his physician for four or five months. There

seems, further, to be no question that, after the limb was taken off, the plaintiff suffered considerable pain from the working out of a piece of bone above the place where the limb was amputated. No question is raised as to the age of the plaintiff, which was twenty-seven years, nor that he was in good health and was receiving $1.50 per day.

The declaration of the plaintiff, upon analysis, seems to resolve itself into two separate and distinct affirmations of negligence.

It is charged in the declaration,

1st. That the exploded engine was improperly and negligently managed by defendant's agents and servants, in that more steam was allowed to generate than the engine had capacity to contain.

2d. That said engine was defective, and that defendant had notice of the defects.

According to the declaration, the defects charged to have existed in the engine, and to have been known to defendant, are as follows: (a) That the dome of said engine was improperly and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode. (b) That the large size and construction of said engine rendered it unsuitable to the road on which plaintiff in error used it, to-wit, from Atlanta, Ga., to Charlotte, N. C., and that it required great care and diligence on the part of the defendant's agents to adjust the same so as to prevent accidents, which care and diligence the defendant failed to give. (c) That the dome castings were not properly riveted and fastened to the dome proper. (d) That there was a flaw near the dome casting near which it was riveted to the dome proper. That the dome casting was of infirm material, unskillfully made, and unfit for the use intended, to the knowledge of the plaintiff in error.

It will thus be seen, from an examination of the declaration, as before stated, that the evidence necessarily groups

itself around these two separate and distinct specifications of negligence, to-wit, improper and negligent management of the locomotive in question, and defects in the construction thereof.

The questions involved in the case are, briefly stated, as follows:

1st. The question arising upon the evidence introduced by the plaintiff below over the objection of the company, tending to show a possible promotion of the plaintiff in his employment with the Central Railroad Company, the object of which was to enhance the damages and therefore swell the recovery in the case.

The controversy over the admissibility of this testimony arose in the following manner:

Q. Who was your (plaintiff's) superior officer at the time you were hurt?

A. Mr. Schmidt.

Q. I mean just above you in the control of that train?

A. Mr. Burnett.

Q. What was he?

A. He was my conductor.

Q. You state that Mr. Burnett was your conductor and the officer immediately in charge?

A. Yes, sir.

Q. State your grounds for believing you would acquire a position as yard-conductor, such as Mr. Burnett had? What was the next grade of officer after the coupler, such as you were?

A. Conductor.

By the court:

Q. Where is the brakeman—where does he come in?

A. The head-coupler and the switchman—a man who minds switches; does not have much to do with switching cars; he does whatever the coupler says.

By Mr. Ladson:

Q. Just state to the jury what position you had reason to believe that you would acquire in rising, and state why you think so?

A. Well, I think so by staying there; I staid there and served my time out first; I filled several men's places there.

Q. What places?

A. I filled Mr. Banks' place, my yardmaster.

Q. State that so the jury can understand it?

A. Mr. Banks would be out and I would go and take his bills and draw them off on a slip of paper; go out and get the cars and draw the numbers off and give them to the yard-master in the office.

Q. You have at times discharged the duties of yard-master?

A. Yes, sir.

Q. You said something about serving your time out?

A. There is a system by which you go in there as a coupler or train hand in the yard, and if a man falls out you stand a chance of taking his place.

Q. What salary does the average yard-conductor obtain?

A. They get from sixty to seventy-five dollars per month.

To all of this testimony (see pp. 74 and 75 of the record), in reference to the possible promotion of plaintiff, the defendant objected and, on the objection being overruled, an exception was then and there noted by the court.

Again, in the testimony of E. W. Burnett (see pp. 34 and 35 of the record) the same attempt on the part of the plaintiff was renewed, and it was sought to prove the custom regarding the promotion of car-couplers in railroad yards. The question and answer to which objection was made were as follows:

Q. What was the custom regarding the promotion of couplers in railroad yards?

A. The next step from where he was at the time he got hurt would have been to have charge of an engine—what we call a yard-engine.

To this ruling an exception was then and there entered.

Again: It seems from the record (see record, pp. 33 and 34) that the depositions of one W. M. Lewis had been taken, and when offered were objected to upon the ground that the witness was present in court under a subpœna at the time of the introduction of the interrogatories and his answers thereto, that he should have been placed upon the stand, and that the introduction of the depositions was inadmissible. The objection of the plaintiff in error was overruled and an exception to the ruling of the court was then and there entered.

Again: During the progress of the trial the plaintiff in error offered in evidence the record of a suit brought by attachment against the Baldwin Locomotive Works in favor of Henry Elliott, the declaration in said suit claiming twenty thousand dollars damages for the same injuries as are sued for in this case. So far as are material, the allegations in said declaration were as follows: "Your petitioner says that said explosion of said engine was due to its unskillful, improper and defective condition. Said defects consisted in the dome of said engine being unskillfully and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode. Said engine was defectively constructed in other respects, to-wit, the dome casting was full of flaws, the same was not securely and properly riveted to the dome proper, and there was a large crack or flaw in the dome casting or cap near which it was riveted to the dome. Said dome casting was of infirm material, unskillfully made and unfit for the use intended.

"Plaintiff further says: Said defendants are engaged in

the business of manufacturing and selling locomotives in the State of Pennsylvania ; that they are the manufacturers and constructors of the engine which was exploded as aforesaid, and disposed of the same to the Richmond & Danville Railroad Company, to be used by said company on its road at Atlanta, and at other points on its said line of railroad. Said explosion occurred but a short time after said defendant sold said engine to said company.

"That said defects which caused said explosion existed at and during the time said engine was being constructed, and that said defendant knew, or could, by the exercise of ordinary diligence, have discovered said defects, and that they were guilty of gross and criminal negligence in so constructing said engine." See record, pp. 58, 59, 60.

While this is not the whole of the delaration and record sought to be introduced, it yet serves to show the point raised by the offer to introduce it, viz., the intention of the plaintiff alone to hold the Baldwin Locomotive Works responsible for the injury, charging the said Baldwin Locomotive Works with responsibility for the defects in question, it being offered on the part of defendant in the court below, as showing an admission that the negligence, if any, from which his injuries resulted was not the negligence of the plaintiff in error here, but of the said Baldwin Locomotive Works. Portions of the record of said suit sought to be introduced more fully appear in the assignments of error below.

Another issue involved is the question of the extent and limits of the responsibility of a railroad company to a person other than a passenger or an employee, for injuries resulting from latent and undiscoverable defects in the manufacture or construction of the machinery and appliances of the company.

The main stress of the case, as tried in the court below, was upon the law upon this point, the object and effort of

the plaintiff in the court below being to show that the defects charged were such as might have been, and should have been, detected and remedied by plaintiff in error, and the contention of the plaintiff in error being that it had performed every act required by the rule which imposes upon it the exercise of *all ordinary and reasonable care and diligence*. The contention of the plaintiff in error on the trial was, and here will be, that, under the undisputed evidence, it is clear that it did no act and omitted no precaution required by the rule in question, and that, although proof of the injury shifted the *onus* to the plaintiff in error, the presumption was fully met, sustained and rebutted, and that the case should have been taken from the jury.

The question arising upon this branch of the case was presented to the court below by requests for instructions to the jury, embodying the law upon this question as it appeared to the plaintiff in error. (See pp. 76 and 77 of the record.)

Upon the trial the plaintiff in error, conceiving that no sufficient evidence had been offered upon the point of negligence in managing and handling the engine in question, requested a charge to the effect that there had been introduced no sufficient evidence to charge the plaintiff in error with negligently handling or managing the engine. The charge requested, together with the other charges requested, appears in full under the head of assignments of error.

ASSIGNMENTS OF ERROR.

1st. The court erred in admitting the testimony to which objection was made, and to the overruling of which objection and exception was then and there noted and entered by the court, in reference to the possible promotion of plaintiff, the said testimony being as follows. (See pp. 74 and 75 of the record.)

Q. Who was your superior officer at the time you were hurt?

A. Mr. Schmidt.

Q. I mean just above you in the control of that train?

A. Mr. Burnett.

Q. What was he?

A. He was my conductor.

Q. You state that Mr. Burnett was your conductor and the officer immediately in charge?

A. Yes, sir.

Q. State your grounds for believing you would acquire a position as yard-conductor, such as Mr. Burnett had? What was the next grade of officer after the coupler, such as you were?

A. Conductor.

By the court:

Q. Where is the brakeman? Where does he come in?

A. The head-coupler and the switchman—a man who minds switches; does not have much to do with switching cars; he does whatever the coupler says.

By Mr. Ladson.

Q. Just state to the jury what position you had reason to believe that you would acquire in rising, and state why you think so?

A. Well, I think so by staying there; I staid there and served my time out first; I filled several men's places there.

Q. What places?

A. I filled Mr. Banks' place, my yardmaster.

Q. State that so the jury can understand it?

A. Mr. Banks would be out and I would go and take his bills and draw them off on a slip of paper; go out and get the cars and draw the numbers off and give them to the yardmaster in the office.

Q. You have at times discharged the duties of yard-conductor?

A. Yes, sir.

Q. You said something about serving your time out?

A. There is a system by which you go in there as a coupler or train hand in the yard, and if a man falls out you stand a chance of taking his place.

Q. What salary does the average yard-conductor obtain?

A. They get from sixty to seventy-five dollars per month.

2d. Plaintiff in error says that the court erred in overruling the objection made by the plaintiff in error to the depositions of W. M. Lewis. The ground of the objection taken was that the witness was present in court under subpœna; therefore, the depositions made by him in answer to interrogatories were inadmissible, and exception to the ruling of the court was then and there entered. See record, pp. 33 and 34.

3d. Plaintiff in error says that the court erred in admitting the evidence of E. W. Burnett, over objection, as to the custom regarding the promotion of car-couplers in railroad yards. The question and answer to which objection were made were as follows:

Q. What was the custom regarding the promotion of couplers in railroad yards?

A. The next step from where he was at the time he got hurt would have been to have charge of an engine, what we call a yard-conductor.

To this ruling an exception was then and there entered. See record, pp. 34 and 35.

4th. The defendant says that the court erred in sustain-

ing the objection of plaintiff to the record and the suit brought by attachment against the Baldwin Locomotive Works in favor of Henry Elliot, the declaration in said suit claiming twenty thousand dollars damages for the same injuries as are sued for in this case. So far as are material, the allegations in said declaration were as follows:

"Your petitioner says that said explosion of said engine was due to its unskillful, improper and defective condition. Said defects consisted in the dome of said engine being unskillfully and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode. Said engine was defectively constructed in other respects, to-wit: the dome casting was full of flaws, the same was not securely and properly riveted to the dome proper, and there was a large crack or flaw in the dome casting or cap near which it was riveted to the dome. Said dome casting was of infirm material, unskillfully made, and unfit for the use intended.

"Plaintiff further says, that said defendants are engaged in the business of manufacturing and selling locomotives in the State of Pennsylvania; that they are the manufacturers and constructors of the engine which was exploded as aforesaid, and disposed of the same to the Richmond & Danville Railroad Company, to be used by said company on its road at Atlanta and at other points on its said line of railroad. Said explosion occurred but a short time after said defendant sold said engine to said company.

"That said defects which caused said explosion existed at and during the time said engine was being constructed, and that said defendant knew, or could, by the exercise of ordinary diligence, have discovered said defects, and that they were guilty of gross and criminal negligence in so constructing said engine."

"That said defendant knew that said engine was a powerful and, being improperly constructed, a very dangerous

machine; they knew that the same was intended to be used by said railroad company on public highways and other places where the people lawfully went to transact business, and that from an explosion of said engine would follow death or injury to some person or persons.

"That said defendants concealed said defects from said railroad company, and falsely represented to said company that said engine was safely and properly constructed, thereby deceiving said railroad company. Said action of said defendants in so sending forth said defective, dangerous and infirm machine, to be used by said company as aforesaid was wrongful and productive of imminent danger to the persons and lives of others, as witness the injury to petitioner as above related; was a violation of law and of their duties and obligations in that regard; for which wrong and damage they, the said defendants, are answerable to this plaintiff, the law imposing upon said defendants as builders of ponderous, powerful and dangerous machinery, which they know is intended to be used in the public marts and on the highways where people lawfully meet and assemble (the improper and defective construction of which will likely and naturally endanger the person and lives of others), the duty to carefully and skillfully construct the same."

To this evidence the plaintiff objected on the ground that it was not germane to the case before the court, as it was *res inter alios acta*. The objection was sustained and the evidence excluded. Exception was then and there noted by the court. See record, pp. 58, 59, 60.

5th. The defendant says that the court erred in sustaining the objection made by the plaintiff to the record aforesaid, including demurrer filed to said declaration by the said Baldwin Locomotive Works, upon the ground that the matters and things alleged in plaintiff's declaration are

not sufficient in law, and that no cause for action appears against these defendants in the statements of said declaration." Also the judgment of the court overruling said demurrer in the following language: "After hearing argument on the within demurrer, it is ordered that the same be overlooked." To this objection (evidence?) the same objection was made by the plaintiff and sustained by the court, and exception to this ruling was then and there entered. See record, pp. 58, 59, 60.

6th. The defendant says that the court erred in refusing to charge the jury as requested in writing as follows: "In this case the undisputed facts exist that the engine and boiler in question were purchased from the Baldwin Locomotive Works, builders of established good character and reputation; that when completed and tendered to the defendant, its machinery was put in order in the presence of the agents of defendant by an agent of the builder sent out with it for that purpose, and then by that agent, along with the agent of defendant, was taken out on the road on a trial trip, the steam being raised to the regular running pressure. That test was satisfactory and, after it was made, the locomotive was accepted by defendant. This was in June, 1886. It ran nearly seven thousand miles on one division of defendant's road between this time and the following October. It was then brought to the Atlanta and Charlotte division, and ran until the 26th of November, 1886, when it exploded while standing on a side track in defendant's yard at Atlanta. It is now known that this explosion was caused by a defect in the material of which a certain casting was made which formed a part of the boiler. This casting, when the engine was completed and delivered to the defendant, was covered by several casings, which are usual parts of such an engine, and which completely concealed the defect. It appears that it was in part,

if not entirely, concealed, even if these casings or coverings had been removed, by the lap of the boiler plates, and there is evidence showing that it could not have been seen if the casings had been removed. So far as the evidence discloses, no indications of the existence of this defect had ever appeared. It was a latent defect, and, in my opinion, it has not been established by sufficient evidence that it could have been discovered by the defendant by the exercise of ordinary and reasonable care and diligence, such as the law would require under the circumstances of this case. I do not think, therefore, that the defendant has been shown to have been guilty of negligence in procuring in the first instance, or in having in its use and upon its premises, the engine in question." This charge the court refused to give, and the defendant then and there asked that objection be noted by the court, which was done. See pp. 76 and 77 of the record.)

7th. The defendant says the court erred in refusing to charge the jury as requested in writing as follows: "Nor do I think that it has been established by sufficient evidence that the defendant has been guilty of negligence in handling and managing the engine. There is some evidence by the witness Lewis that what is termed the pop-valve, which I take to be the safety-valve, and what he called the 'right-hand pump,' were not in order. I understood him to refer by the word 'pump' to the appliance used for forcing water into the boiler, but this witness stated at the same time that the pump was 'worked on' by defendant's mechanic, and he also admitted that he, Lewis, had not sufficient experience to say that this condition would have caused the explosion; but the evidence of the mechanics who know this engine is positive that there was no such thing as a pump on it for forcing water into the

boiler. This was done on this engine by an appliance known as an injector, and all the witnesses who were examined on that subject state positively that the pop-valve and injector was in good working order, and these witnesses were experts who had handled the engine the evening of the accident; but even if the evidence of Lewis as to the pop-valve and the right-hand pump being out of order were uncontradicted, it would not, in my opinion, be sufficient alone to show negligence; for this reason, the evidence is uncontradicted that both of these parts of the engine —that is, the pop-valve and the injector—are in duplicate, and that either one is sufficient without the other, or in case of defect in the other, and would do the work necessary for safe operation. There was also some evidence that there was an escape of steam, which some witnesses called the 'fretting' of the pop-valve and others called it by different names. But I think that this circumstance is fully explained by one of the plaintiff's witnesses, Mr. Krogg, and by the other witnesses and facts in the case. It appears from Mr. Krogg's testimony that this occurs when the steam is almost up to the pressure at which it is set to escape or pop off, and that it also occurs when the valve is screwed down sideways or one side lower than the other, and that in neither of these cases is their danger of an explosion from this cause; indeed, the evidence tends to show that this being an escape of steam would lessen the pressure and therefore diminish the danger."

The court refused to give this charge, and the defendant then and there asked that an exception be noted by the court, which was done. See pp. 77 and 78 of the record.

8th. The court erred in refusing to charge the jury as requested in writing as follows: "I conclude, therefore, that the evidence given at this trial, with all the inferences

that a jury could justifiably draw from it, is insufficient to support a verdict for the plaintiff. Under the law, therefore, I think it is my duty to instruct you to return a verdict for the defendant."

The Court refused to give this charge, and the defendant then and there asked that an exception be noted by the court, which was done. See p. 78 of the record.

BRIEF OF THE ARGUMENT.

For the purpose of clearing the ground of certain testimony introduced by the plaintiff in the court below, we invite the attention of the court to a very brief consideration of the utter insufficiency of the plaintiff's testimony in chief to make out even a *prima facie* case unaided, of course, by the presumption against the defendant from mere proof of injury. And first, as to the testimony of Henry Elliott, the plaintiff, there is nothing in his testimony which tends to show negligence. He says the engine was "popping off," because it was hot. He does not point out a single fact to show that the engine was unduly hot, or negligently hot. It would be strange indeed, if any engine with a head of steam on were cold. Nor does he state a single fact which affords ground for even an inference that the "popping off" was other than an indication of safety. When, however, we come to look into his cross-examination, he frankly admits that he is not, and never was, an engineer; that he did not know what caused the "popping off" referred to on the direct. On the direct he says that the pop-cock was making a fluttering noise as though it was trying to blow off steam and got stuck, but in the light of his disclaimer on the cross-examination of any knowledge as to *why* it was "popping off," these vague

statements or conjectures have no force as evidence. We take it, then, that the evidence of the plaintiff is without value upon the entire issue of negligence. It seems to be inference, conjecture and opinion merely.

Upon analysis of the testimony of the witness Lewis, it is found that his evidence wholly fails to bring home to the defendant any act or omission tending to establish negligence. Naturally, the witness had formed his own theory as to the cause of the explosion—a theory in all probability satisfactory to himself, but, as his own evidence shows, not supported by the facts. Nor is it at all strange that, being a plaintiff in litigation against the defendant growing out of the same inevitable accident, that his theory should be adverse to the defendant. In his answer to the third interrogatory he theorizes as follows: The right-hand pump of the engine which pumps water into the boiler was out of order and failed to pump that night. As the result of this, the engine was hot and this in turn resulted in a failure to "pop off" and the failure to "pop off" caused the explosion.

But the witness has yet another theory, and in his answer to the ninth interrogatory it is the "*pop-valve*" that was out of order resulting in the explosion. "If" says he, "the pop-valve had been in order, it (the pop-valve presumably) would have gone off at 140 lbs. of steam." It is not surprising that on the cross-examination he frankly admits, after advancing a full-blown theory in explanation of the explosion, that he does not know what he is talking about. Says he; "I have been railroading only one month and do not understand all about these things." "I do not know whether the failure of a pump to work will always render an engine so hot as to cause it to explode." "I *suppose* the pump has to force water into the boiler to make steam for the valve to pop off" "*It seems* there should be enough water in the boiler to keep it from getting hot (it

is to be observed that now the *boiler* and *not* the engine is to be kept from getting hot), if there is steam enough in the engine to cause it to explode. *I had not been working long enough to understand the effect of the pump upon the explosion.*"

What is all this but the merest surmise? He speaks neither with the certainty of an expert nor with the clearness which comes from practical experience. It seems to us, therefore, that his conjectures are entitled to no weight.

Again, the declaration charges no defect either in the pop-valve or in the pump. Outside of the clearly specified defects in the engine in respect of the dome ring, its fastenings, etc., hereinafter discussed, the declaration is silent as to other omissions or commissions, exceptthe charge that the locomotive was *negligently managed* in that more steam was allowed to generate than the engine had capacity to contain.

In the light of the explosion which then occurred, it is clear enough as a fact that more steam did generate than the engine had capacity to carry, but, until it be shown that the alleged defects and blemishes in construction and attaching of the dome ring, etc., are chargeable against the defendant by virture of knowledge or notice thereof, it is to be borne in mind that the defendant, its agents and servants, had a right to deal with the locomotive *as in all respects sound and safe*. The charge is mismanagement in permitting steam to generate in excess of the capacity of the engine, and there is absolutely not an item of negligence charged except this in respect of the management.

The bare physical fact of the explosion, therefore, does not make the defendant liable to the charge of mismanagement, unless negligence be brought home to the defendant in respect of the defects which made the explosion possible.

The witness, Burnett, testifies: "I am not experienced in engines." "The engine was making a peculiar noise about

the pop-valve where the steam goes off." "I ——— never heard an engine make a noise like that." "It *seemed* as if the valve was hung and the steam could not escape." This witness also, on the cross-examination, clears the ground by the following: "I am not an engineer nor mechanic nor machinist, and only know the parts of an engine from my duties as a conductor." This is all there is of his testimony; the rest was ruled out on motion.

The next witness, Fred Krogg, testifies as follows: "——— Heard the noise made by pops on engines and then I heard an unusual noise which I thought must have been the cylinder plates blown out, and then I heard the cars rebound." "The noise of the pop-valve sounded *as if there was not enough pressure to lift it and let the steam escape*. There are a great many reasons for the noise. One is that it might have been set at 140 pounds and there being 130 pounds in the boiler, caused it to simmer. Another reason would be, that it might have been screwed to probably 200 pounds, and when that amount was not in the boiler it would cause it to simmer. Another reason would be that the cock might be choked and not set level on its seat. If it was set at 200 pounds, and that was more than the capacity of the boiler, something would have to give way. An unequal pressure on the bearings would prevent it from working. The noise I heard was unusual enough to attract my attention." On cross-examination, however, he says: "When I first heard the noise the pop was fretting, and *a perfect valve would do this with the steam barely up to the discharging point*."

How does this testimony in any wise tend to charge the defendant with negligence?

Bearing in mind that we are not, in this connection, discussing the question of defects, we submit that this evidence is not only entirely consistent with proper management, but shows an obviously reasonable explanation of the "popping

off," so called. The witness seems to speak frankly and intelligently, and his testimony is straightforward. He does not pretend to know what caused the explosion.

The testimony of Postell needs no comment.

At this point the testimony in chief closes.

Summing up briefly now, the case of the plaintiff in respect to mismanagement, "popping off," allowing an excess of steam to generate in the boiler, defective pump, overheating, insufficient water in boiler, we submit to the court with confidence that, but for the presumption against the defendant which requires it to prove that it exercised all reasonable care and diligence, it is without merit utterly. Even if we assume that the evidence before the court in the record shows that the "pop-valve" was out of order (and there rests the burden of the case), there is an entire absence of all evidence to *connect the explosion with the condition of the pop-valve in any relation* of cause and effect; true, it seems to have been somewhat unusual, but there was nothing phenomenal about it. A fair inference from the testimony would be that the "simmering," "fretting," etc., were indications of safety to the locomotive rather than warnings of impending danger. Even if negligent, even if the failure of the pump to force water into the boiler were negligent, none of the several derelictions, proven but not averred in the bill, seem to have been the *proven, proximate cause of the explosion which occurred;* and unless every act of negligence, every lapse from the standard of "all ordinary and reasonable care and diligence," which is the measure of defendant's liability, gives the right of recovery, whether connected with the catastrophe or not, it seems to us that on this branch of the evidence the case of the plaintiff must fail.

Conceding that more steam did generate than was warranted by the capacity of the boiler, *non constat* that the engine was properly managed, unless defendant be charge-

able legally with those alleged defects which affected the carrying capacity of the boiler. Once prove knowledge of such defects or negligent ignorance, which is equivalent to knowledge as to such defects, and the charge of mismanagement is established. The plaintiff would not, in such cases, be obliged to show mismanagement, for the bare use, with knowledge or notice, of a locomotive so afflicted, would of itself be sufficient to sustain recovery.

ASSIGNMENT OF ERROR, NO. 1.

The plaintiff in error next invites the attention of the court to a consideration of the first assignment of error, viz.: that which alleges error in the admission of testimony tending to show a prospective and possible promotion of the defendant in error to a higher position in the service of the company and to larger wages. See record, pp. 74 and 75.

The question involved in this assignment of error has been determined by the Supreme Court of Georgia, and the decision is against the admissibility of such evidence. In the case of the Richmond & Danville Railroad Company *vs.* Allison, 86 Ga., p. 145, the question arose in the following manner: Upon the trial the following questions were propounded and aswered, over the objection of counsel for defendant, as follows:

Q. How soon after his injury (referring to Mr. Allison) were there any vacancies to which promotions could have taken place?

A. Vacancies were shortly afterwards; say certainly in the course of the next six month, I think, after Allison was hurt. According to Mr. Allison's standing and the classification which I give, his prospects for promotion to one of these places was good."

Say the Supreme Court of Georgia: "The defendant objected to this testimony and all other evidence of the witness tending to show prospects of promotion, as being simply the opinion of the witness and showing a possibility too remote to be the basis of consideration by the jury in finding damages. We think this exception is well taken, and the court erred in allowing the testimony complained of to go to the jury. The testimony of this witness shows, in substance, that he was the assistant superintendent of the

Railway Mail Service of the Fourth Division; that Allison was a postal clerk under him, and that he had special supervision of Allison's record and work; the next class above Allison in the line of promotion at the time he was injured was "Class 5," and that the salary in that class was $1,300 a year; that Allison was receiving, when injured, $1,150; that Allison's standing in regard to the basis of promotion was "first-class"; that there was no vacancy in the class above Allison at the time he was injured, but two vacancies occurred in the course of from three to six months thereafter; that there were three men of Allison's class, including Allison, and that the other two stood as well as he did, and both were older than Allison; one had been in the service longer and the other a shorter time than Allison; political consideration, enter somewhat into the appointment of clerks; the promoting power is at Washington; the office here is the recommending power; a vacancy in the class above Allison might be filled sometimes from other routes, and men taken from another route and put in who occupy, say, a second rank; it is in the power of the department under the rules to do that. There is no certainty at all where there is a vacancy in the position of chief clerk—the clerk in charge—that one of the lower grade on the same route will go up—no more than in any other business; it is not guaranteed.

"We think this evidence shows that Allison's promotion was too uncertain, and the possibility of an increase of his salary from $1,150 to $1,300 too remote to go to the jury, and for them to base a verdict thereon. While it is proper in cases of this kind to prove the age, habits, health, occupation, expectation of life, ability to labor and probable increase or diminution of that ability with lapse of time, the rate of wages, etc., and then leave it to the jury to assess the damages, we think it improper to allow proof of a particular possibility; or even probability, of an increase of

wages by appointment to a higher public office, especially where, as in this case, the appointment is somewhat controlled by political reasons. The deputy clerk of this court, for example, is very efficient and faithful, and if there should be a vacancy in the office of clerk of court, it is not only possible but very probable, that he would be appointed to fill the vacancy, thereby obtaining a much larger salary than he now receives; but if he should be injured as Allison was, and were to sue the railroad company for damages, we do not think it would be competent for him to prove the possibility or probability of his appointment to fill a vacancy in the office of clerk, especially as the *personnel* of the court upon which such appointment must depend might change in the meantime. To allow the jury to assess damages in behalf of the plaintiff on the basis of a large income arising from a public office which he has never received, which is merely in expectancy and might never be received, or if received at all, might come to him at some remote and uncertain period, would be wrong and unjust to defendant. We believe the rule of most of the railroads in this State is to promote their employees. An employee commences at the lowest grade, and if he is competent, capable and efficient, he is very likely to be promoted upon the happening of a vacancy above him. If one occupying a lower grade of service were injured, would he be allowed to prove, unless he had a contract to that effect, that his prospects of promotion to a higher grade and better salary were good, and would the jury be allowed to base their calculation and estimate of the damages upon a much larger salary which he never received, but merely had a prospect of receiving? It will be observed that the testimony in this case shows that there were two others in the same class with Allison, equally competent and efficient as he was, and it is by no means certain that Allison would have been preferred to each of them in case of vacancy, and promoted above them;

so it could not be said that he was in direct line of promotion." See also Pierce Railroads, 303; Brown *vs.* Cummings, 7 Allen (Mass.), 509; Boyce *vs.* Bayliffe, 1 Camp., 58; Brown *vs.* Railroad Company, 64 Iowa, 656.

It will be observed by the court, from a comparison of the two cases, the one on trial and the one cited, that the testimony in the case at bar was even weaker than that in the case cited. In his testimony the plaintiff says in his answer to one of the questions, as follows:

A. "There is a system by which you go in there as a coupler or train hand in the yard, and if a man falls out you *stand a chance of taking his place*."

It is not only possible but highly probable that the jury in this case were largely influenced by this testimony in arriving at the amount of their verdict. The amount of the verdict itself would indicate it.

By the law of Georgia, it would seem, independently of all decisions upon the question, that the evidence is incompetent and inadmissible.

Section 3072 of the Code of Georgia of 1882 is as follows: "If the damages are only the imaginary or possible result of the tortious act, or other and contingent circumstances preponderate largely in causing the injurious effect, such damages are too remote to be the basis of recovery against the wrong-doer."

Section 3073 of the same Code provides: "Damages which are the legal and natural result of the act done, though contingent to some extent, are not too remote to be recovered. But damages traceable to the act, but not its legal or material (natural) consequence, are too remote and contingent."

Section 3074 of the same Code provides: "If, however, the tort is committed, or the contract broken, or the duty omitted, with a knowledge and for the purpose of depriving the party injured of such benefits as are specified in the last paragraph, then the remote damages are made

by such knowlege and intent a proper subject for consideration by the jury."

These citations from the Code of Georgia, as we take it, are merely declarative of the general law governing cases of this character.

In the 19th Ga., p. 416, will be found the case of the Coweta Falls Manufacturing Company, plaintiff in error, *vs.* Curran Rogers, defendant in error. This was an action by Rogers brought against the Coweta Manufacturing Company for damages caused by their failure to comply with the contract to repair certain machinery belonging to the plaintiff.

The machinery was to be repaired as soon as possible, or by July 1st, 1851. There was a failure to perform the contract, and a suit resulted. Prospective profits were claimed as damages resulting from the breach of the contract, and the Supreme Court of Georgia says: "But was the basis upon which this judgment was rendered maintainable? It was founded almost exclusively upon speculative profits; it was a calculation upon conjectures, and not upon facts. We will not say that there is no case where the allowance of damages upon expectant profits is admissible; but we are quite sure that this is not one of them, the gains were too remote and uncertain, depending upon a variety of contingencies, the failure of any one of which would subvert the whole computation. Who will undertake to say and swear that a cotton factory in Georgia will pay expenses, much less yield a certain amount of net profits for any given period? What a conflicting opinion and experience would such a question elicit! We are inclined to think that this whole testimony, as to the gains which the plaintiff would have derived from this contract, had he not been prevented from realizing them by the delinquency of the defendant, should have been rejected as too contingent and speculative, and too dependent upon the fluctuation of

markets, the chances of business and other casualties, as to enter into a safe or reasonable estimate of damages."

It has been held that even damages based upon the dissolution of a partnership rendered necessary by a personal injury were not recoverable, upon the ground that they were too remote to form a proper basis for an estimate of damages. See International Railway Company *vs.* Irvine, 64th Tex., p. 529.

Almost the precise question involved in the case at bar, decided in the Georgia case above cited, came before the Supreme Court of Massachusetts, and it was there held that a prospective promotion of the character in question could not form the basis for an estimate of damages, and was incompetent as evidence. See 7th Allen, Mass, p. 507; also Brown *vs.* Cummings, 1st Chitty Pleadings, p. 440; Moore *vs.* Adams, 2d Chitty R., p. 198; Boyce *vs.* Bailiff, 1st Camp., p. 58.

It has also been held that evidence to show the average profits of a business, claimed to have been impaired as the result of personal injuries, is incompetent. See Burbach *vs.* Goodyear Rubber Company, 54th Wis., p. 208.

Assignment of Error No. 2, abandoned.

ASSIGNMENT OF ERROR, No. 3.

(See pages 34 and 35 of record.)

The plaintiff in error respectfully submits that every reason bearing upon the admissibility of evidence tending to show a prospective promotion, bears with equal, if not greater force, upon the question presented by this assignment of error.

The evidence objected to is removed even one step further from competency, in that it is not directed to proof of an established system in regard to promotions, but the proof of a bare usage and practice in the service of the railroad.

We have been unable to find a single case adjudicating the precise question, and the only explanation of this fact is, possibly, to be found in the fact that an appellate court would hardly be seriously asked to pass upon a question so easy of solution under the established rules of evidence.

It is not possible to draw any analogy upon this question from the law of contract in the matter of custom and usage.

We therefore submit the question with the same criticisms and citations as made in regard to the kindred, and perhaps identical, question discussed in a former assignment of error.

Assignments of Error Nos. 4 and 5, abandoned.

ASSIGNMENT OF ERROR, No. 6.

We next come to the most important question involved in this writ of error, arising from the refusal of the instruction asked by the plaintiff in error. See record, pp. 66 and 67. These instructions, we submit, should have been given in form as prayed.

In Irelson *vs.* Southern Pacific Ry. Co., 44th American & English Railroad Cases, p. 319, the plaintiff, a passenger, alleged injuries resulting from the breaking of a car wheel on the coach in front of the sleeper, derailment of the train, etc.

There was a recovery of $750.00.

In reviewing the judgment, the court says: "There can be no doubt that, as it is shown that the wheel was manufactured in a proper manner, by reputable manufacturers, and that, like it, the axle was without blemish; that as no defect was revealed after the usual examination and testing on the night of the occurrence and shortly before the occurrence, no fault could be attributed to the defendant from which liability for the injuries sustained should be attached."

Palmer *vs.* Del. & Hudson Ry. Co., N. Y. Court of Appeals, decided April 15, 1890, and to be found in 44th American & English Railroad Cases, p. 298, was a case of injury to a passenger, caused by the breaking of a spindle in the drawhead of the coach next to the locomotive. As a result of the breaking the engine became detached, and ran ahead, drawing rapidly through the train the bell rope, the metallic end of which struck the plaintiff. The court says: "With a view to relief against the imputation of negligence, it was proved that the spindle in the car was *inaccessible to observation or inspection*, and the defendant gave evidence tending to prove that, for the purpose of its

examination, it was necessary to put the car into the shops and take out the draw-bar, which it was not the custom to do very frequently, and that the spindles and draw-heads of this car were removed in '83, and the reason given for not deeming it necessary to overhaul and examine this apparatus more frequently was that it was made of the best wrought iron and that its vibration and the strain upon it, in its use, are not such as to require it; that, so far as appears by the evidence, the spindle of a draw-head of a car had not before been known to break by the use made of it in running trains; and that, while the period of availability of a car for use is ordinarily twenty-five years, this spindle had been in the car only two years when it gave way.

"*If the defendant was required to use only ordinary care in maintaining in a condition of safety its appliances used in running its trains, it would not be chargeable upon the facts proved with liability for the plaintiff's injury.*" (See the entire case.) See also Hagerman *vs.* Western Railroad 13th N. Y., p. 9; Bowen *vs.* N. Y. Central R. R., 18th N. Y., p. 408; Brown *vs.* N. Y. Central Railroad, 34th N. Y., p. 404; Caldwell *vs.* N. J. Steam Boat Co., 47th N. Y., p. 282; Penn. Co. *vs.* Roy, 102d U. S., p. 451; L. & N. R. R. *vs.* Allen, Admr., 78 Ala. 494.

Says Day, J., in Beattie *vs.* Central of Iowa, 8 American & English R. R. Cases, p. 210: "If an accident has occurred, it is generally easy to see how it might have been avoided. The proper inquiry is not whether it might have been avoided if the company had anticipated its occurrence in the manner that it happened, but whether, in the light of all the existing circumstances, the company exercised reasonable care and diligence to guard against danger."

"No case or principle can be found, or if found can be maintained, subjecting a person to liability for an act done without fault on his part. All the cases concede that an

injury arising from an inevitable accident, or, which in law and reason is the same thing, from an act that ordinary human care and foresight are unable to guard against, is but the misfortune of the sufferer and lays no foundation for legal responsibility." See Harvey *vs.* Dunlap, Hill & Den. (Sup. N. Y., p. 193.)

In Robinson *vs.* New York Central Railroad, 20th Blatch., p. 338, which was the case of a passenger injured by the explosion of a boiler, the court holds: "The jury were also instructed that it was incumbent on the defendant, as a passenger carrier, to see to it, by every test recognized by experts, that the boiler was in a safe condition, but that it was not liable for a defect that could not be discovered by such tests."

The first section of the *syllabus* in the case of Stephen McPadden, Respondent, *vs.* The New York Central Railroad Company, Appellant, 44th New York, p. 478, reads as follows:

"Although railroad companies are bound to exercise the utmost care and vigilance for the safety of their passengers, they are not held to an absolute warranty that the passengers shall not be injured, rendering them liable in any event, in the absence of negligence."

The case in its entirety is important and instructive, and the attention of the court is asked to it in full.

In discussing the duty of a carrier of passengers, the American and English Encyclopedia of Law uses the following language: "The duty of the carrier requires it not only to test its machinery and appliances before they are put into use, but also to test them from time to time subsequently, in order that it may be known if they are deteriorated by wear and tear. The criterion of negligence in such cases is not whether the particular defect which was the cause of the injury could possibly have been detected by the use of scientific means of investigation, but whether

the defect *ought to have been observed practically and by the use of ordinary* and reasonable care." See American and English Encyclopedia of Law, vol. 2, p. 758.

The Illinois Central Railway Company *v.* Phillips, 49th Ills., p. 234, was the case of a boiler explosion by which a person was injured. The *syllabus* is as follows: "In an action against a railway company, for injuries alleged to have been sustained by plaintiff while in the depot of the defendant, from the explosion of the boiler of one of defendant's engines; *held*, that the simple fact that the boiler exploded was *prima facie* evidence to overcome which it must be shown that the materials used in the construction were of the kind usually employed, and that it had been subjected to and withstood the usual tests, and was used with judgment and skill by persons of experience." See also Railroad Company *vs.* Bishop, 50th Ga., p. 465.

It will, of course, be conceded without the citation of authorities, that the standard of diligence in respect of a passenger is higher than that which governs railway corporations in respect of non-employees and strangers. Yet we undertake to say that had the defendant in error been a passenger and not a stranger, the evidence in the record shows that there should have been no recovery. In Rorer on Railroads, vol. 2, p. 949, the rule as to passengers is thus stated:

"The rule in regard to safe roads and appliances is not that the same shall be absolutely perfect, but that the utmost skill, diligence and care in preparing them, and the best known means of testing their safety, shall be resorted to and used to render them so, and to detect and discover insecurities."

If under the rule stated, the plaintiff in error would not be liable to defendant in error *as a passenger*, it follows necessarily that it would not be liable to him *as a stranger*.

The assault upon the evidence of the company begins, in

fully disposed of the respondent's case upon this branch of it, it follows that, if the showing made by the plaintiff in error, being unrebutted, establishes the exercise of the full measure of diligence imposed upon it by the rule stated and by the law of Georgia, the Circuit Court erred in not giving the instructions prayed, and in submitting to the jury, as an uncontroverted fact, an issue upon which there was no conflict of evidence.

In this connection, therefore, we ask the attention of the court to the evidence offered by the plaintiff in error, to show its own full diligence, still viewing the issue from the least favorable point of view of carrier and passenger.

At the pages 41 and 42 of the record will be found the testimony of A. W. Gibbs. He agrees with the other witnesses as to the defects in the casting of the dome ring. He shows that the dome ring was hidden in the interior of the locomotive, a half inch of steel, firmly riveted, concealing it from view; that it was covered by three layers of different material; he explains the utter impracticability of dismantling the engine. It was made by a reputable manufacturer, was new, it had been tried, the defects were very unusual, that there was no reason to unbuild the new locomotive, which had been tried and tested.

J. E. Cumbia testifies (see record, pp. 42 and 43) that the engine was in good order and had never gotten out of order more than twice, and from the evidence it does not appear that such repairs as were made were made in connection with that part of the engine claimed to have been defective.

By the testimony of C. F. Thomas (see record, pp. 60 and 61) it is shown, and without objection, that locomotive works generally send agents along with engines to put them up and try them in the presence of the road officials; that the machinery is disconnected as a rule and the parts are put together by the locomotive works agent; that the

engine is then tried on the road, etc. It further appears from his testimony that the boiler parts come already put together.

Without quoting his evidence at further length, it is clearly shown that the plaintiff in error was and had been in the exercise of not only ordinary and reasonable care and diligence, which is the measure of his liability in this case, but had exercised extraordinary diligence, prudence and foresight.

By the testimony of T. L. Thrower (see record, pp. 61 and 62) the perfect order of the locomotive as well as the diligence of the defendant is shown.

By the testimony of M. L. Collier (see record, pp. 62 and 63) the same facts appear. And it is also shown by his testimony that the nature and location of this defect were such as to render it wholly inaccessible to any such inspection as was required of the railway company.

So also the testimony of D. E. Brooks (see record, p. 64). From his evidence it also appears, and it is important to note this, that even after the explosion, to put the engine in running order required only the replacing of the defective casting in the dome.

So also the testimony of A. W. Gibbs (see record, pp. 64 and 65).

It is further in evidence that the locomotive in question was subjected to a water-pressure test of *180 pounds*, and that the strain of the water test is eqdal to that of the steam-pressure test. This is uncontroverted. See record, p. 65, testimony of Gibbs.

The nature of the test to be applied to an appliance or contrivance must necessarily depend upon the character of the thing to be tested. A chain or rope is tested by subjecting it to the strain of severe tension, i. e., by using it, and instances might be multiplied.

How else would an engine, either locomotive or station-

ary, be tested than by putting it into active use? In addition to this, be it observed, that the record is wholly silent upon the question as to what tests should have been employed other than those shown to have been adopted. At the bottom, in its last analysis, the whole claim of respondent is based upon these time-worn, threadbare, anti-corporation ideas, "I was injured, therefore you were negligent." We take it that the rule of diligence, at least in Georgia, is the same in respect to injuries by a railway to a stranger as in the case of employees. In both calss of cases the company is bound to ordinary and reasonable care diligence, and to this alone.

Except in the two instances of injuries to passengers and loss of, and damage to, freight, where extraordinary diligence is imposed, the rule is the one indicated.

Section 3033, of the Code of Georgia, provides: "A railroad company shall be liable for any damage done to persons, stock or other property, by the running of the locomotives, or cars or other machinery of such company, or for damage done by any person in the employment and service of such company, unless the company shall make it appear that their agents have exercised all ordinary and reasonable care and diligence, the presumption in all cases being against the company."

In 87 Ga., page 402, will be found the case of the Central Railroad and Banking Company *vs.* Kent, which to us seems strongly to bear in favor of the position taken by plaintiff in error. While that case ultimately turned upon the question whether the catastrophe, which was a washout of a culvert upon the road, was caused by the action of an unprecedented flood, the Supreme Court of Georgia takes occasion to examine carefully into the conduct of the Railway Company and fully exonerates it from all blame. The injury was to an engineer.

Following in the lead of that case, we ask: "What had

been the character of this locomotive? What had been its condition during the entire period of its use, and how it had traveled seven thousand miles? What was its condition when inspected by its engineer immediately before the explosion, and when tested by water pressure and tried in the presence of the officers and agents, both of the manufacturers and of the railroad company? Were the conclusions of the officials of the road, its mechanics and engineers, justified by the attendant facts and circumstances? Did the pop-valve and the "popping off" give any premonition of the explosion to occur when those very indications suggested safety and not danger?" Observe that the court intimates that if the injury *had been to a passenger*, the railway had proved its diligence. McNally *vs.* S. F. and W. Railway Company, 86th Ga., p. 262, was the case of an injury to a servant caused by a flake of iron knocked from a swage, and the court says here: "We have carefully examined the evidence in this record and are satisfied that the injury to the plaintiff was the result of a mere accident—a thing not reasonably to be expected—a rare and peculiar accident. The implement is by the evidence shown to have been in *average condition*. It is true there is a witness who testifies that the implement, in the condition in which it was, was not proper for use and should have been repaired; *but the company had discharged its duty to the public, or mere visitors to the shop, by keeping the tool in average condition. Most tools are, in some degree, dangerous.*" See also Christian *vs.* Columbus Railway, 79 Ga., p. 460, where the court holds that in the case of the homicide of a person, neither passenger nor servant, the rule of diligence in Georgia is "all ordinary and reasonable diligence." See also Krogg *vs.* A. and W. P. Railway, 77 Ga, p. 202; Morgan *vs.* Central Railroad, 77 Ga., p. 788.

This latter case was an instance where the Railway showed full diligence. It was a stock killing case, and the Court takes occasion to say: "The law, in raising a pre-

sumption of negligence and requiring the Company to rebut that presumption by showing that all ordinary and reasonable diligence was observed, *means to accept such explanation as, according to the manner of conducting business, it is possible to make.*"

See also Ga. R. R. & Banking Co. *vs.* Wall, 80th Ga., page 202.

Mr. Pierce, in his work on railways, says (see page 319): "The Court will order a non-suit or withdraw a case from the jury, not on a mere preponderance of evidence but only where a verdict upon it would be so unsupported by the evidence as to require it to be set aside. If there is no proof of this negligence, it is error to submit the question to the jury. To sustain the verdict, a scintilla of evidence is not enough, but proof of well-defined negligence is necessary." See also Pierce on Railways, pages 370, 371, 372.

Finally, we ask the Court's attention to the depositions offered in evidence, found in the Record, pages 44 to 58.

By them it seems to us apparent and manifest that the Plaintiff in error has lived and acted up to the full measure of "all ordinary and reasonable diligence." We fail to note an instance of either proven or inferential default anywhere. Every reasonable and ordinary act was done, if the uncontroverted evidence of the Company's witnesses and even of the witnesses of the plaintiff in the Court below is to be taken as proof, looking to the safe operation and condition of this locomotive.

What other things might have been done which would have revealed the defective condition of this dome ring, we conceive is not the question. The question is—what reasonable and ordinary dictate of common prudence was disregarded? For an answer to these questions, save the vague conjectures of self-confessed ignorance, we have searched in vain.

With these suggestions and criticisms, the Plaintiff in error confidently submits the issues.

Respectfully submitted.

JACKSON & JACKSON,
T. J. LEETWICH,
Counsel for Plaintiff in Error.

HENRY JACKSON

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JAMES H. McKENNEY,
CLERK.

Supreme Court of the United States.

October Term, 1892.

No. 199.

THE RICHMOND & DANVILLE RAILROAD CO.,
Plaintiff in Eror,

vs.

HENRY ELLIOTT,
Defendant in Error.

IN ERROR TO THF CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHEN DISTRICT OF GEORGIA.

BRIEF FOR DEFENDANT IN ERROR.

[redacted]

C. T. LADSON,
Attorney for Defendant in Error.

FRANKLIN PUBLISHING HOUSE,
Atlanta, Ga.
1893.

Supreme Court of the United States.

OCTOBER TERM, 1892.

No. 199.

THE RICHMOND AND DANVILLE RAILROAD COMPANY,
Plaintiff in Error,
vs.
HENRY ELLIOTT,
Defendant in Error.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF GEORGIA.

BRIEF FOR DEFENDANT IN ERROR.

STATEMENT OF THE CASE.

This action was brought in the Superior Court of Fulton County, Georgia, by Henry Elliott, against the Richmond & Danville Railroad Company, to recover the sum of twenty thousand dollars damages, which, as he alleged, he sustained by reason of the explosion of one of said Company's locomotive engines in its railway yards, in the city of Atlanta, on the night of November 25th, 1886, whereby he lost his right leg, the same being amputated at or near the

hip, and which explosion, he alleged, was caused by the wrong and neglect of said Compamy.

Subsequently, said Company caused said action to be removed from said State Court into the Circuit Court of the United States for the Northern district of Georgia, under the Removal Act. (Printed record p. 3.)

On the 2d day of November, 1888, the case was tried and a verdict rendered in behalf of the plaintiff for the sum of ten thousand dollars. (Rec. 29.)

No motion for a new trial was made; the plaintiff in error filed its certain bill of exceptions, and caused a writ of error to issue in the premises, bringing said case to this Honorable Court. (Record 79.)

The material allegations of the declaration, and amendment thereto, are as follows:

The petition of Henry Elliott shows, etc., that the Richmond & Danville Railroad Company, etc., has injured and damaged your petitioner in the sum of twenty thousand dollars, for that, on the night of November 25th, 1886, your petitioner, while in the discharge of his duties as head yard coupler in the services of the Central Railroad & Banking Company, and while at his post of duty in Atlanta, was stricken by a piece of engine boiler or dome, which was blown from an engine, to-wit: No. 515, in the possession and control of the Defendant and its servants, which was caused by the explosion of said engine on account of the carelessness and negligence of the defendant's agents and servants. Said engine was improperly and negligently managed by defendant's agents and servants, in that more steam was allowed to generate than the engine had capacity to contain; that said engine was defective, and the defendant had notice of the defect.

Said defect consisted in the dome of said engine being improperly and insecurely fastened to the boiler, which rendered it dangerous to use and liable to explode, which

fact was known to the defendant, its agents and servants. . . . . Your petitioner further shows that said engine was improperly constructed in other respects to-wit: it was not properly riveted and fastened, that is to say, the dome castings to the dome proper, and there was a flaw in the dome casting near where it was riveted to the dome proper. Said dome casting was of infirm material, unskillfully made, and unfit for the use intended.

Said defect was known to the defendant, or ought to have been known.

Petitioner shows that at the time of said explosion, ... he was standing about fifteen or twenty yards from said engine, and from the blow received from the flying parts of the same his right thigh was crushed and mangled to such an extent as to require amputation of said leg just below the hip joint. . . . . "That the explosion of said engine was caused by the defective condition of the injector, or pump, it failing to pump sufficient water into the boiler, which caused the boiler to become hot and generate an excessive and dangerous quantity of steam.

"That the safety or 'pop' valve of said engine was defective and out of order, it, from said defect, failing to allow the excess of steam to escape from said boiler, all of which defects were known, or should have been known to the defendant."

THE RELATION WHICH DEFENDANT IN ERROR BORE TO PLAINTIFF IN ERROR.

In this connection it is proper to state the relation in which the plaintiff below stood to the defendant railroad. Plaintiff, as the record shows, was in the employ of the C. R. R. & B. Co., and was one of a crew of a switch engine belonging to said latter company.

The explosion and injury occurred in the yard of the defendant railroad, in which yard and on which company's railroad tracks under some contractual arrangements between the two companies, the C. R. R. & B. Co. switched cars, and when injured, Plaintiff's engine was standing on the defendant's main line, waiting for the defendant's freight engine (the one which exploded) to pull out, which was on defendant's side track. That such joint use of said tracks was for a valuable, though not necessarily an actual, money consideration may be fairly and legally assumed.

THE EVIDENCE AT THE TRIAL.

A brief reference is here made to the evidence introduced at the trial. Later, in the discussion of sixth, seventh and eighth assignments of error, which were requests by defendant in error's counsel for the Court to direct the jury to return a verdict for the railroad company, under the entire evidence, a more particular statement of the evidence, as appears in the record, will be made.

Te begin with, the Plaintiff below was exceedingly fortunate because parts of the engine were exhibited to the Court and jury during the trial, and they were thus privileged to see and judge of its sadly defective condition for themselves: and though a "whole college of bishops" were to solemnly swear contrary to the occular demonstration afforded them, they would, of course, be compelled to reject such testimony.

That the machinery in question, the defective condition of which, together with the improper management of the engine by the railroad and its servants, and other defects in said engine, caused said engine to explode, was remarkably and wretchedly defective and unfit for use, was shown by the occular demonstration thus afforded the jury, and by all of the witnesses on both sides in the case.

And the principal witness for the defendant Company,

Mr. Gibbes, its Master Mechanic, testified (record 42) that he had never seen such a piece of machinery before, and that it was so unusually defective, that he had his moulders try, and fail to duplicate same. The fireman of the engine which exploded, Mr. Lewis, testified (record 33) that there was something wrong with the apparatus for pumping water into the boiler, and that the boiler got too hot, and further that the pop valve was out of order, failing to "pop" off at the proper time, causing the engine to explode, and that the minute before the explosion the gauge showed 150 pounds of steam when but 140 pounds was allowed, and the pop valve was set (Cumbea record 42) to 135 pounds.

Several other witnesses, including the plaintiff, also swore (rec. 30) that the pop valve was or seemed to be "hung" or "stuck," failing to perform its highly necessary office. Two expert moulders (Eaton & Peacock) and one engine boiler maker of 20 years experience (Finnegan) united in testifying (rec. 37-8) first , that the defects were easily discoverable by any and all of the persons engaged in the manufacture of the dome ring, and those who put the engine together, and that same extended to and was easily visible from the exterior of the metal ; and that without removing the outer laggings, an inspector, during the time the engine was being used by the railway, could easily remove the valve seat, and with the aid of a lantern, could readily have seen the defects or flaws. The aperture through which to look was 14 inches in diameter.

Several of the witnesses for the company (Gibbes, rec. 41; Collier, rec. 63, and Thomas, rec. 61; all master mechanics) also, testified that the valve seat, etc., was readily removable, and that a defect on the surface of the inner side of the dome ring could be easily seen with the aid of a lantern or torch.

Other evidence of like tenor was introduced, such as the readiness with which such defects could be discovered by water pressure and hammer tests, by defendant in error.

ARGUMENT.

It must appear to any impartial mind, from an examination of the record, that there is ample evidence to support the verdict. And this result may be fairly reached from either of the following standpoints: *First.* As concerns the management and operation of the engine on the night of the accident, and the defective condition of the injector or pump and pop-valves. *Second.* Because no single test was made by the railway company itself—water test, hammer test, or any of the known tests usual and proper to be made—at any time whatever (the steaming up and trial trip testified to by the witness Gibbs being in no way *a test*) of the safe and suitable condition of the engine. *Third.* The utter failure of defendant to show that it ever had its boiler, including the dome ring, inspected for patent, visual defects or flaws, such as the dome ring in question exhibited. *Fourth.* The ease with which, by the exercise of proper diligence, said defects could have been discovered by defendant after it purchased said engine from the Baldwin Locomotive Works and got it into its possession, and at any time down to the time of the explosion; and, lastly, that the defects in the dome ring were shown, of necessity, to be so glaring and patent to the manufacturer at any and every stage of its construction, and the putting together or building the engine, as to make the negligence of the manufacturer the negligence of the defendant.

ASSIGNMENTS OF ERROR.

First and third assignments.

The first and third assignments being on analogous, almost identical grounds, will be considered together.

The evident purpose of the law is, to fairly compensate

the person permanently injured, where his ability to labor and earn money has been totally or partially destroyed, by awarding him such a sum, for such loss or impairment, as the evidence reasonably shows such person would have earned in the future, but for such wrongful injury, subject, of course, to the usual limitations and deductions, as the exigencies of life suggest, such as sickness, impairment of physical strength by advancing years, etc., etc., and the discount for cash all paid in one sum, instead of receiving his earnings, as they accrue, throughout one's life.

In the very nature of things, mathematical certainty cannot be here attained. "In actions against carriers of passengers for injuries, there seem, as we have said, no well defined rules for estimating damages.

It is a matter to be submitted to the sound discretion and judgment of the jury, who are to consider the actual loss to the plaintiff, present and prospective, which is the very lowest amount they will feel justified in giving in any case. Beyond this, any rule for damages must be regarded as more or less terra incognita."

2 *Redf. on R'ys, p.* 309.

The plaintiff was "head yard coupler," one grade just below yard conductor, and testified without objection that he had been coupling and switching cars four or five years, though he had been promoted to the position of "head yard coupler." The loss of his right leg at the hip of course entirely destroyed his ability to perform railroad work.

The court permitted the following evidence to go to the jury, stating to the railroad's counsel, in the presence of the jury: "I will try and control it with the jury when it goes in. Let him (plaintiff) go on and see what he can prove about it." (Record 31.)

Q. Who was your superior officer at the time you were hurt?

A. Mr. Schmidt.

Q. I mean just above you in control of that train?

A. Mr. Burnett.

Q. Who was he?

A. He was my conductor.

Q. What is the next grade of officer after the coupler, such as you were?

A. Conductor.

By the court: Where is the brakeman—where does he come in?

A. The head coupler and the switchman, a man who minds switches. He does not have much to do with switching cars. He does whatever the coupler says.

Q. Just state to the jury what position you had reason to believe that you would acquire in rising, and state why you think so?

A. Well, I think so, by staying there. I staid there and served my time out first. I filled several men's places there.

Q. What places?

A. I filled Mr. Banks' place, my yard master.

Q. State that so the jury can understand it.

A. Mr. Banks would be out, and I would go and take his bills and draw them off on a slip of paper, and go out and get the cars and get them up and draw the numbers off, and give them to the yard master in the office.

Q. You have at times discharged the duties of yard conductor?

A. Yes, sir.

Q. You said something about serving your time out?

A. There is a system by which you go in there as coupler or train hand or in the yard, and if a man falls out you stand a chance of taking his place.

Q. What salary does the average yard conductor obtain?

A. They get from sixty to seventy-five dollars.

Q. A month?

A. Yes, sir.

And the following questions and answers were excepted to for like alleged reason, that the evidence was "speculative." (Rec. 34) This forms the ground of the 3d assignment of error.

To the witness E. W. Burnett.

Q. What was the custom regarding the promotion of couplers in railroad yards?

A. The next step from where he was at the time he got hurt would have been to have had charge of an engine—what we call a yard conductor.

Viewed from the standpoint of reason, logic and law, the above evidence was properly admitted, even though same had not been *tentatively* received by the court in its charge to the jury.

The plaintiff was a "head coupler" earning $1.50 per day at the time he was injured. He was but twenty-seven years old, and was in good health.

In assessing his financial loss for permanent disability to earn money throughout his life, must the estimate be necessarily based upon the amount earned and position occupied at the time of the injury?

As has been justly said: "If the plaintiff were a young man of character, capacity and industry, and had chosen his occupation and commenced its pursuit, his yearly income at first might be small, but in a few years he might be able to increase it very largely; yet, under the rule contended for, he would be confined during his life to the small income he was making at the commencement."

And if, as matter of law, plaintiff below was not inexorably bound by the wages received when injured, what more satisfactory proof could possibly be submitted than was here allowed? The jury cannot rely wholly on their own surmises or speculations.

They should be aided, as far as possible, by the statement of such facts and circumstances, as here admitted in evi-

dence, not as furnishing an exact measure, but for the purpose of guid ng the discretion of the jury.

The promotion from "head yard coupler" to yard conductor did not depend upon political exigencies as in the case of possible promotion of a mail clerk in the postal service, or other political preferment, hedged about by innumerable pitfalls, and "ways that are dark and tricks that are vain," to say nothing of the labyrinthian mazes of Civil Service Reform.

Nor is it akin to a case, where a person was assaulted, and claimed that by reason of the injuries received, he was prevented from getting a certain position, the facts being that he had never even applied for the position, though intending to do so, and had no promise or assurance that he could have obtained same, if the application had been made.

The plaintiff here did not simply state an opinion but he gave facts which tended to show in all human probability, in the ordinary course of events, under the system testified to, that he would become a conductor. There was as much certainty as regards the promotion, as there was or is about scores of matters and elements which juries necessarily pass upon, in making up their verdicts; such as sickness or health, probability of other misfortunes or accidents, long or short life, whether he would have remained in the same occupation (railroading) or have abandoned that, and pursued one more lucrative, or less so.

"It is generally permitted for the plaintiff who claims to recover for loss of time, loss in business, to prove the nature and extent of his business, anh the probable profits arising therefrom, in order to enable the jury to form a correct estimate of his loss." *Redf. Law of Rys. p.* 311.

In the case of *Nebraska City vs. Campbell*, 2 Black, 560, this court decided that it was advisable for a physician to prove that "he was engaged in extensive practice at the time of the injury, and also, that it was a period of great sickness to the community."

The Court held: "Now, the evidence in question was relevant and pertinent, with a view to show the extent and

amount of the ordinary business of the plaintiff in his profession, of which it is averred he was deprived during the time of his disability, and laid a foundation which enabled the jury, with some degree of certainty, to ascertain the direct and necessary damages sustained from the injuries."

However, further discussion of the question would seem superfluous, for all possible objection was removed therefrom by the court in its charge to the jury. The court charged as follows (see printed record pp. 71 and 72): "I permitted some evidence to be introduced on the subject of the line of promotion in the business in which he was engaged. The plaintiff says, and the jury could consider the fact, that he had a probability of promotion in the line of services in which he was engaged; that the salary of the next grade is from sixty to seventy-five dollars per month; the jury can consider that in finding what his financial loss is. I have permitted the evidence to go to the jury, and I will state to you, that the jury ought not to be governed by a mere conjecture or possibility in a matter of that sort; it ought to be shown to the reasonable satisfaction of the jury that the man after a while would earn more money than he was then earning; it ought to be shown to your reasonable satisfaction, it is a matter for you to determine. The evidence has gone to you, and if you believe it has been shown to your reasonable satisfaction that this man would earn money at some future period, you would be authorized to consider that fact."

The injury received being so grievous, and a verdict having been rendered for only $10,000, it is evident that no harm at all events resulted to defendant in error.

SECOND ASSIGNMENT.

The second assignment of error is as follows: "Said defendant says that the court erred in overruling the objection made by this defendant to the depositions of W. M. Lewis. The ground of the objection taken was, that the witness was present in court under a subpœna, and therefore, the depositions made by him in answer to interrogatories were inadmissible." (Rec. 32).

The exception is utterly untenable. The evidence objected to was taken under a *special statute* embodied in the Code of Georgia, the provisions of which are wholly unlike those sections providing for the taking of *interrogatories by commission*. The provisions of our Code as to the latter mode of taking evidence, is similar to the methods pursued in most of the States, viz: written interrogatories are propounded by the party desiring to take the evidence of a witness, and such interrogatories are served upon the opposite party or counsel, who in turn, propounds cross-questions; after which, commissioners are appointed to execute the commission. Under this system, *no oral examination by either of the parties or counsel is permissible*. Sec. 3884, Code of Georgia, declares: "No party or his counsel or his agent, or other person on his behalf, should be present at the commission, and everything attending the execution should show a perfect impartiality and freedom from bias."

Section 2878 of the Code, which was passed many years before the special act heretofore referred to, declares: "If the state of facts on which the commission issued ceased to exist, (i. e. absence from county, non-residence, sickness, about to move from the county, etc., some one of which is necessary for the commission to issue at all) before the trial of the cause, and the witness is then accessible by subpœna, the testimony taken in interrogatories cannot be used."

The object and desirability of this new special law is patent. Every lawyer knows how much more preferable it is to examine, and cross examine a witness orally, than to propound written questions, because the freedom is greater, much satisfactory evidence being elicited by such personal contact and examination, which, possibly, never could be known without such method.

But the special act referred is as follows: Sec. 3893: "In all counties in this state where there is, or may be a city of ten thousand inhabitants and upwards, either party litigant in any court of record in any such county, without any order or commission may take the depositions of any witness or witnesses in said case, whether resident in the county or not, upon giving the opposite party five days notice of the time and place with names of witnesses."

The succeeding sections provide for the manner of taking such evidence, *providing for oral examination, and cross examination to as full extent as if the witness was being examined on the witness stand*, at the trial of the case.

Section 3896 provides: "The order and scope of the examination shall be had in conformity to the rules of the Superior Court governing the examination of witnesses in trial at law."

Section 3895 also provides: "All motions or applications to postpone or adjourn the proceedings shall be made to the commissioner, and if in writing filed with the return, and if not in writing noted in and become part of the return, with the ruling of the commissioner thereon, and the answer of the witnesses, whether objection be sustained or not."

Thus it will be seen the foregoing special acts concerning such method of taking depositions have no relevancy whatever to the old law quoted concerning the taking of interrogatories by commission.

Such has been uniformly held by all Circuit or *nisi prius* Courts in the State to be the law whenever the question

has been made (there are no printed reports of the descisions of such Courts), and no litigant has yet deemed it expedient to appeal said question to the State Supreme Court.

FOURTH AND FIFTH ASSIGNMENTS

These assignments are untenable because, *first:* There was no material difference between the two declarations in question, and second: The rejected declaration was inadmissible because same was not signed or sworn to by plaintiff, and was merely suggestion of counsel.

First: These exceptions (rec. pp. 75-6) complain of the failure of the Court to allow defendants counsel to introduce in evidence the record of a suit in attachment filed by the plaintiff against the Baldwin Locomotive Works, the manufacturers of the engine which exploded, and which suit was then pending, but which had never been reached for trial, though a demurrer had been filed thereto and overruled.

The declaration was not verified by the oath of the plaintiff, and was not signed by him, but was simply signed by his counsel. No proof was offered to show that he had ever read, or otherwise actually knew its contents, or that the statements therein were not the mere suggestions of counsel. Just for what purpose such declaration was tendered in evidence, the record fails to disclose, nor do the exceptions made specify the grounds of error, and the exceptions for such reason, are invalid.

If the declaration or record was sought to be introduced in evidence, as admissions of the plaintiff, it would not be relevant, because there is no material difference between such declaration and the declaration in the present case, there is no real contradiction between them whatever. The statement of facts descriptive of the defects in the engine in both declarations *are identical*.

Nor can this position be varied because of the allegation

in the Baldwin Works' declaration that, "Said defendants concealed said defects from said railroad company and falsely represented to said company that said engine was safely and properly constructed, thereby deceiving said company."

It will be remembered that the averment in the declaration in this case is, "Said defect was known to the defendant or ought to have been known." Known when?

Not necessarily at the time of the purchase of the engine by the defendant; the defendant ought, by the exercise of proper diligence, have discovered and remedied such defect on any day during the few months it operated same.

Suppose, in point of fact, that the Baldwin Works "concealed said defects" and "falsely represented to said company that said engine was safely and properly constructed?"

Concealed the defects how? There was but one possible mode of concealment, viz.: constructing said engine with the outer lagging and valve seat in its proper position (for it is not contended that the defects were open to the view of one who simply looked at the engine, by standing near same), and failing to specifically point out said defects to defendant. But how does that affect the legal status of the case? For while the seller may have in that case "concealed" the defect, and committed the further wrong of telling defendant that the engine was sound, that would not relieve the defendant in law, or good concience, from having the proper tests applied, and inspection made, by, and for, itself

While the seller may have been guilty of a moral wrong to the purchaser by failing to notify him of defects known to the seller, but which might not come under the eye of the purchaser, without examination or tests, yet that could not alter the duty of the purchaser of powerful machinery, and when defective, necessarily dangerous, to both employees and the public, from making affirmatively proper

examination on his own account, and thereby discharge such important duty to third persons.

In case of injury resulting under such circumstances, the person injured may very well have a cause of action either against the seller of such powerful and dangerous machinery, which the seller knows will come in contact with the public, or the buyer thereof, who supinely relies upon such false assurances; though some authorities seem to hold that there would be no cause of action against the seller on account of lack of privity with the injured persons.

Therefore, as the admission of the Baldwin Works' declaration could not have elucidated the facts, or changed the legal status of the present case, and might have caused confusion therein to no good purpose, it was for above reasons, properly excluded.

Second. The declaration in question was rightfully excluded because same was not verified, or signed by plaintiff but was simply suggestions of counsel.

The above is a correct statement of the law, as decided by this honorable court, *infra* Combs *vs.* Hodge, 21 How. 367, Pope *vs.* Allis 115 U. S. 363, and Delaware Co. *vs.* Diebold Safe Co. 133 U. S. 487, and by the decided weight of authority of the courts of both England and this country.

Inasmuch as the case in 133 U. S. 487, is "all fours" with the case at bar, and must rule the question here made, I will content myself with citing and discussing only a few of the principal authorities.

To hold a litigant in anywise bound by statements made in declarations at law, or bills in equity, where the same are not signed, or sworn to by him, and where, in many instances, he does not, in point of fact, know the precise averments thereof, in advance of a trial upon the merits, would work manifest, and oftentimes, shocking injustice; especially is this true, when the pleading sought to be intro-

duced is filed against a stranger, as in the present case. And there is a distinction founded upon some show of reason between averments in declarations and bills, and those made in answers. In the one, statements or contentions are often made by counsel, somewhat at random, to elicit the truth, having unavoidably an imperfect knowledge of the essential facts of the case; in the answer, the statements therein are intelligently and guardedly made; responsive to averments of the bill or declaration.

"Answers in Chancery, which are confessions, are strong evidence against the party who made them. (Presumably referring to sworn answers.) But a bill in chancery, wherein many of the facts are mere suggestions of counsel, made for the purpose of extorting an answer from the defendant, will not be admitted in evidence . . . . "It is not admitted in courts of law, as evidence, to know any fact either alleged or denied in the bill". Trubly *vs.* Seybert, 12 Pa. St. 104.

In another case even the distinction as to answers was not recognized. Shaw C. J. in a case (13 Mete. 255) where the answer was withdrawn, in the very case upon trial, the plaintiff offering same in evidence, says: "The pleadings are usually filed by the attorneys; and they are filed with a view to laying the merits of the respective parties before the court, in a technical form, and can barely be considered as the act of the parties. A bill of particulars or specifications of defense filed by the defendant is usually a formal document, drawn up by counsel, after some examination of his client's case, and is made broad enough to cover all which the party can expect, in any event, to prove, and in most instances, probably, is not seen by the party in whose behalf it is filed".

The above was approvingly quoted in Dennie *vs.* Williams, 135 Mass. 28, the court holding, "In some cases the declaration in one suit has been admitted in evidence in

another suit; but this is upon the ground that the particular allegations in the declaration were obviously made by the direction of the plaintiff, and were not merely the suggestions of counsel".

And in Elliott *vs.* Hayden, 104 Mass. p. —, one of the cases cited in the above case (135 Mass.), the court say: "As no action of the court was obtained upon the bill in equity, the statements therein, if they had not been made upon the oath of the plaintiffs, might have been considered as mere suggestions of the counsel, and not competent to admission by the parties."

Again: "A bill is evidence of nothing whatever, except the bare fact of such bill having been filed. It is often necessary that it should be proved, in order to let in the evidence or depositions of the witnesses and then to show what facts were in the issue. . . . . Still less will it be received to prove the truth of its own assertions or denials,- although it be offered a nothing more than the declaration of an ancestor, in a question of pedigree; for bills in equity are notoriously filled with fictitious matter.

Neither is it allowed to be used against the plaintiff, the asserter of these false allegations. . . . . The Court looks upon these allegations as mere suggestions of counsel; and connives at statements and charges being made for the sole purpose of putting questions, founded upon them, to the defendant." Gresley, Eq. Ev. 426.

Dorsey *vs.* Gassaway, 3 Am. Dec. 561.

"With respect to the right of a defendant to make use of the plaintiff's bill as admission of the facts therein stated, it is to be observed that, at common law, the general rule is, that a bill in chancery will not be evidence except to to show that such a bill did exist, and that certain facts were in issue between the parties, in order to introduce the answer or the depositions of witnesses; and that it cannot be admitted as evidence to prove any fact either alleged or denied in the bill." Dan. Chan. Pr. 839. Citing authorities.

Pleadings, however, so far as they consist in the written

contentions of the parties, are not in any view evidence, collaterally, of the truth of the facts they aver. 2 Wharton Ev., Section 839.

"A person's answer in chancery, is evidence against him, by way of admission, in favor of a person who was no party to the chancery suit; for the statement, *being upon oath*, cannot be considered conventional merely." Quoting Phillips Ev. Ibid Sec. 1116.

"The statements of a party in a declaration or plea, cannot, it seems, be treated as confessions of the truth of the facts stated by him." Starkie Ev., p. 450.

"Unsworn pleadings are never admitted as evidence against the pleader in another suit between him and other parties, as admissions or declarations of the facts contained in them. Still less would a party be bound by an expression of opinion as to the extent of his legal rights or liabilities." Woods Pr. Ev., p. 502. (Ed. 1886.)

In the case of Crumps *et al vs.* Gerock *et ux.*, 40 Miss., 765, concerning the indebtedness of guardian to ward for interest on the hire of certain slaves, the plaintiff sought to introduce a bill of complaint against the administrator of his deceased brother, wherein was stated, "that he as guardian was responsible to his ward for these several amounts for the hire of said negroes, and for the interest on each year's hire, from the end of the year;" held: "This averment is relied on as proof of the alleged agreement to pay interest on the hire, but it is not entitled to have any such effect. It does not take the form of a promise, or agreement with his ward, or with anybody else to pay such interest; and it can, at the most, be regarded only as the expression of his opinion that by law he is responsible for it.

"But even that would be giving it an importance that is not due to it. The bill is not sworn to, and was not signed by the party, and there was nothing to show that he saw it, or knew what was in it. Such averments are generally the

mere act of the counsel preparing the bill, and stating the case, according to his own views of the relief to which his client may be entitled.

"It is this ground chiefly, that unsworn pleadings in a cause, at law or equity, are never admitted as evidence against the party pleading, as admissions or declarations of the facts contained in them," citing authorities.

"The established rule is now to consider a bill in equity as the mere allegation of counsel, unless the party is connected to it by proof, showing a recognition of its contents, as would be the case if the bill was verified by the complainant's oath." Durden *vs.* Cleveland, 4 Ala., p. 225.

In the case last above cited, the rejected bill had been previously filed by same plaintiff, against same defendant, in another action.

In this connection it may be well to call the attention of the court to certain sections of the Code of Georgia, which seem to have an important bearing upon the point under discussion. If the Baldwin declaration was offered with a view to contradict the railroad declaration, or evidence of plaintiff at the trial as has heretofore been argued, there was no contradiction or difference between them, and none whatever as to plaintiff's oral evidence. (See record.) And yet our Code authorizes contradictory pleadings; and if in case of answers, the same would apply with greater reason to bills or declarations.

Section 3433 declares: "No part of an answer shall be stricken out or rejected on account of being contradictory to another part of the same, but the court shall suffer the whole answer to remain, if the defendant should desire it, and avail himself of any advantage he can or may have, under either or whole of said answer, and proceed to trial accordingly."

The rejected declaration cannot be considered in the light of a contradictory statement of the plaintiff, even though

the same had been signed by him, because the foundation was not laid by the defendant in impeach the plaintiff, by proof of contradictory statements.

As provided by our Code, *Section 3871* is as follows:

"A witness may be impeached—

First. By disproving the facts testified to by him.

Second. By proof of contradictory statements previously made by him as to matters relevant to his testimony and to the case.

Third. By evidence as to his general bad character.

Section 3872: "Before contradictory statements of the witness can be proved against him (unless they are written statements made *under oath* in connection with some judicial proceeding), the mind of the witness himself should be called with as much certainty as possible to the time, place, person and circumstances attending the former statement; and if in writing, the same should be shown to the witness, or read in his hearing, if in existence; and to lay this foundation, the witness may be recalled at any time.

And the only instance where the Code of Georgia recognizes averments made in pleadings as admissions, or evidence, is in *Section 4195*. . . . . "A sworn answer is subject to amendment at any time, by leave of the court, as other pleadings; but an admission made in such answer, shall always be evidence when offered by the other party."

It is nowhere held or declared that a declaration at law, unsigned and unverified by plaintiff, is a "solemn admission *in judico*." And some text writers seem to fail to note the distinction between unsigned and unsworn pleadings, and those that are thus signed and verified; and a careful examination of the decisions relied on in the text for such loose statements of the law, will in nearly every instance be found that the pleadings were verified by the oath of the party.

Recurring again to Wharton: "It is proper to add at this place that the pleadings of a party in one suit may be used in evidence against him in another not as estopped, but as proof, open to rebuttal and explanation, that he admitted certain facts. But in order to bring such admission home to home, the pleadings must either be signed by him, or it must appear that it was within the scope of the attorney's authority to admit such facts. Yet even if such admissions are thus brought home to the party, they are entitled to but little weight.

At the time they were made, they were self-serving, *not self-disserving*, as a matter of practice, pleadings are often framed by counsel, rather to put an issue in shape, than to exhibit his client's actual standpoint as to particular facts; and even where the client signs such papers he does so as a mere matter of form.

So far as concerns the party, pleadings at common law are inadmissible, if disputed, as evidence of the truth of the facts stated therein.

A plea of guilty, however, in a criminal issue, being presumed to be solemnly entered by the defendant himself, may be put in evidence against him as a confession of the fact, in a civil issue. And a plea verified by affidavit, or an answer in chancery, may be properly viewed as a solemn admission susceptible of being introduced in other suits against the party by whom it is intelligently made." 2 Wharton Ev. Sec. 838.

In the leading English case, *Boileau vs. Rutlin*, 2 Ex. 664, the authorities up to that time were elaborately reviewed. The action was for use and occupation for premises under for a certain period and for a determinate agreed rental. Defendant answered that he had been let into possession under an agreement to purchase, and he paid into court a sum which he alleged was sufficient compensation for the occupation had. He had given notice to produce

the agreement, but instead of offering same when plaintiff offered to produce it, he tendered as evidence of the agreement a certain bill in chancery which the plaintiff had filed against the defendant to compel him to perform it, and which stated the terms of such contract of purchase. After discussing several cases which the defendant claimed sustained their contention, the Court, by Parke B., says: "On the other hand, in the above case of *Lord Ferrers vs. Shirley Fitz.* 195, a bill preferred by defendant stating the existence of a deed at that time was objected to as proof of that fact on the ground that it was no more than the surmise of counsel for the better discovery of the title, and the Court would not suffer it to be read. And Lord Kenyon in *Doe d. Bowman vs. Sybourn*, 7 T. R. 2, when the distinction was insisted upon between facts stated by way of inducement, and those whereon the plaintiff founded his claim for relief rejected that distinction and pronounced his judgment, in which the Court acquiesced, that a bill in chancery is never admitted farther than to show that such a bill did exist, and that certain facts were in issue between the parties, in order to let in the answers or depositions. And it appears in *Taylor vs. Cole*, 7 T. R. 9, his lordship held the same doctrine, with the exception that a bill in chancery by an ancestor was evidence to prove a family pedigree therein, in the same manner as an inscription on a tombstone or any entry in a Bible.

The exception was disallowed by the opinion of the judges in the *Banbury Peerage* case. The judge unanimously held that a bill in equity was no proof of the facts stated therein, or as a declaration respecting pedigree; that it made no distinction that the bill was filed for relief. And in answer to the question whether *any* bill in chancery can ever be received as evidence in a court of law, to prove any facts either alleged or denied in such bill, the judges gave their opinion that, generally speaking, a bill in chan-

cery cannot be received as evidence to prove any fact alleged or denied in such bill.

But whether *any possible case* might be put which would form an exception to such general rule, the judge could not undertake to say. In the case of *Medcalf vs. Medcalf*, 1 Atk. 63, Lord Chancellor Hardwicks held that the rule of evidence at law was that a bill in chancery ought not to be received in evidence, for it is taken to be the suggestion of counsel only; but in court of chancery it had often been allowed and the bill read.

This distinction was after repudiated in the case of Kilbee *vs.* Sneyd, 2 Molloy, 208, by Lord Chancellor Hart.

When the defendant's counsel offered to read part of the bill to prove certain facts on which he rested part of his defense, the Lord Chancellor said the court never read a bill as evidence of a fact: "It is mere pleader's matter; the statements of a bill are no more than the flourishes of the draughtsman."

The main case, of course, referred to a bill previously filed in a case between the same parties, and concerning the ame subject matter.

It presents a stronger case than the case at bar, under defendants contentions, the declaration in question having been filed against a complete stranger to the action. Up to that time, it would seem, no attempt had been made to introduce pleadings, where strangers were concerned, for the court goes on to say: "Many cases were suggested in the argument before us, of the inconveniences and adsurdities which would follow from their admission in evidence in other suits of the truth of facts stated. There is, however, no direct authority on this point."

In the case of *Church et al. vs. Shelton* 2 Curtis C. C. R. p. 271, a close analogy is found to the case at bar. There the libellants had shipped $40,000 worth of sugar in the vessel of the respondents. They alleged that by a barra-

trous design of the Master, in concert with certain wreckers, the vessel was run upon reefs and wrecked, and the wreckers claimed certain salvage, the libellants paying $6,200 as their part of the salvage demanded. That the barratrous design was afterwards discovered, and that the owners instituted suit in admiralty in their own names to recover the money thus paid as salvage, which till then, was still in the hands of agents, alleging this fraudulent conspiracy between the salvors and the master, and recovered same, and the bill filed was to recover the part contributed by the libellants to said salvage fund.

The libellants sought to introduce an exemplification of the record of the said suit in admiralty, filed by respondents, *first*, as evidence of their confession of the facts therein alleged of the barratrous stranding of the bark by the master; and *second*, that the decree *in rem* is conclusive evidence of the facts which it finds, and that it finds, though not in terms, by necessary implication, all the essential facts alleged in the libel.

Upon the admissibility of the record, the court, after discussing various American authorities, say: "*In Boileau vs. Rutlin*, 2 Ex. R. 664, decided in 1848, the court of Exchequer after a very careful examination of all the previous authorities at law and in equity, in England and Ireland, came to the decision that a bill in chancery is not evidence of the truth of the facts stated in it, as against the party in whose name it is filed, even though his privity be shown; but it is only admissible to show that a suit was instituted and the subject matter of it.

I consider this decision to be in conformity with the weight of authority in this country."

Coming down to a later period, the point at issue was settled by this honorable court, in the case of Combs vs. Hodge, 21 How. 397. The head note is as follows: "The pleadings in another suit, where the parties were different

and the petition and answer signed by counsel, cannot be resorted to for admissions of the respective parties." In the opinion, the court say: "The record in the District Court at New Orleans, in the suit between Love and Hodge, appended to the bill, does not contain evidence applicable to this case. The parties to that suit were different (exactly as in case at bar); and the petition and answer are signed by counsel, and not by parties, and cannot be resorted for admissions of the respective parties," citing Boileau vs. Rutlin. (Supra.)

In the case of Pope vs. Allis, 115 U. S. 370, it is held: "where a bill or answer in equity, or a pleading at law, is sworn to by the party, it is competent evidence against him in another suit, as a solemn admission by him of the truth of the facts stated." And the necessary inference arises, that the court, recognizing the best authorities heretofore quoted, meant as well, that pleadings *which are not sworn to*, would not be admissible in evidence as admissions.

And, in conclusion, as heretofore contended, I respectfully submit that the case of Delaware County vs. Diebold Safe Company, 133 U. S. 473, absolutely controls the point in issue. That action was brought by the Diebold Company against the Commissioners of Delaware County, as assignees or sub-contractors of part of a contract relating to the iron work of a jail made with Meyer & Son, who had contracted to construct a jail for the defendants; and the plaintiff averred and sought to prove at the trial, that notice of such assignment or sub-contract was given defendant at a regular meeting of its board, and that no objection was made thereto; and that a written notice was subsequently served upon the defendant; that the plaintiff expected to do the iron work, and would demand payment direct from the board, in the same manner as Meyer & Son would have been entitled to under their contract with the board, the plaintiff contending that there was a complete

substitution of itself, instead of Meyer & Son, which was agreed upon and acquiesced in by the defendant board.

At the trial the defendant denied having had any such notice of assignment or sub-contract, or that there was any privity between itself and the defendant, etc., and to sustain its contention tendered in evidence a complaint filed by plaintiffs, signed by plaintiff's attorney, in an action against Meyer & Son, on the same cause of action, as tending to show that at that time plaintiff did not claim to have any such demand as it now asserted against the present defendant, and as tending to rebut its statements as to the acquiescence by the board of the charge of contractors. This evidence was objected to by the plaintiff and excluded by the court, and to the ruling excluding it the defendant excepted.

The court, Mr. Justice Gray delivering the opinion, *held:* "The only ruling upon the evidence which is excepted to is the exclusion of the complaint in an action brought by the present plaintiff against its assignors. But there is no material difference between the facts stated in that complaint and those stated in the present suit; and the former complaint, not under oath nor signed by the plaintiff, but only by its attorney, was clearly incompetent to prove an admission by the plaintiff that upon those facts it had not a cause of action against this defendant." Citing Combs *vs.* Hodge (*supra*), Pope *vs.* Allis (*supra*), and Dennie *vs.* Williams (*supra*).

I deem it needless to draw a parallelism between the cause last cited and the case at bar. They are obviously analogous and the former must control the latter.

SIXTH, SEVENTH AND EIGHTH ASSIGNMENTS.

These assignments, it will be observed (record, pp. 76-7-8) are based upon the failure of the court to give certain lengthy requests to charge, in charge to the jury, in effect directing the jury to return a virdict for the Defendant in Error; and while such assignments are based upon three segments or paragraphs of such requests, the requests comprise one complete whole, and may be considered in their entirety, as argumentative, prejudiced and untenable statements of the Plaintiff in Error's contentions, negativing some of its own witnesses' testimony, and utterly ignoring the Defendant in Error's side of the case.

In this connection it is respectfully submitted, that the assignments, which are purposed attempts to have this Court to pass in review upon the facts, as is the office of the Circuit Court, upon a motion for a new trial when made therein, are invalid, and cannot be considered.

The instructions prayed for were offered after the entire evidence for both Plaintiff and Defendant below had been submitted, not at the close of Plaintiff's evidence, as in Mercantile Insurance Co. vs. Folsom, 18 Wall. 237, and other cases therein cited, and the verdict of the jury, of course was general; and the requests relate exclusively to questions of fact, or the sufficiency or weight of evidence. The Constitution provides that no fact tried by a jury shall be otherwise re-examined in any court of the United States other than according to the rules of the Common Law.

Facts so tried could be only re-examined under the rules of the Common Law, either by granting of a new trial by the court where the issue was tried, or by a *venire facias de novo*, by an appellate Court, for some error of law which intervened in the proceedings.

When there is evidence proper to be submitted to the

consideration of the jury, and the party against whom the jury finds, complains of such finding, as being contrary to the evidence, *a motion for a new trial* should be resorted to and not *a writ of error*. The rules of law which would be applicable in that event are very different from those which apply as the case is presented.

Schuchbardt *vs.* Allen, 1 Wall. 359; Parsons *vs.* Bedford 3 Pet. 433; Brooklyn Ins. Co. *vs.* Miller, 12 Wall. 285; Cooper *vs.* Omohundro, 19 Wall. 65; 2 Story Const. sec. 1770.

If, however, these assignments are held valid and the evidence thereunder reviewable, it will be remembered that no exception is taken to the charge of the court (which appears in full in record, pp. 67–73) and which charge is a fair and able presentation of the issues of the case and the law bearing thereon (with one exception, to the prejudice of defendant in error, to be hereinafter noted). And the most convenient though not concise method of showing, irrefragably, that such requests were rightfully refused, because misleading and not supported by the evidence, is to quote the requests here, and note their misstatements, etc., as the same are quoted. Of course, in the light of the law as repeatedly held by this court, that the weight of evidence, and the proper deductions to be drawn from this or that fact or circumstance, are wholly to be determined by the jury, without interference of the court, which is indeed the very essence of trial by jury under the Constitution, and that it is not a question of a "sufficiency" of evidence to be passed upon by the court in directing a verdict, but whether there is *any* evidence upon which a verdict could be reasonably founded; 11 Wall. 438, 9 Pet. 541, 92 U. S. 716, 106 U. S. 30, 17 Wall. 657; that it would seem superfluous to enter into any detailed discussion of the above assignments: yet, at the risk of so offending, I will call attention to some of the most glaring inconsistencies in the rejected requests, and

will thus content myself, as to the evidence, without citing, more particularly, the evidence introduced by the defendant in error.

SIXTH ASSIGNMENT.

"The defendant says the court erred in refusing to charge the jury as requested, in writing, as follows:

"In this case the undisputed facts exist that the engine and boiler in question were purchased from the Baldwin Locomotive Works, builders of established good character and reputation; that when completed and tendered to the defendant company, its machinery was put in order in presence of the agents of the defendant by an agent of the builder, sent out with it for that purpose, and then by that agent, along with the agent of defendant was taken out on the road on a trial trip, the steam raised to the regular running pressure; that test was satisfactory, and after it was made the locomotive was accepted by the defendant." (Why satisfactory? Satisfactory to whom? Is it intended to convey the meaning that it was a compliance with the requirements which the law casts around the uses of powerful machinery merely to steam it up to "the regular running pressure?") and not to make the water pressure tests—50 pounds above regular running pressure for itself—as described by Gibbs (Record, p. 65) or the "hammer test," mentioned by Finnegan (Record, p. 36), Heenan (p. 23). This was in June, 1885. It was nearly seven thousand miles on one division on defendant's road between this time and the following October. It was then brought to Atlanta and Charlotte division, and ran until the 26th of November, 1886, when it exploded whilst standing in the defendants' yard in Atlanta. It is now known that the explosion was caused by a defect in the material of which a certain casting is made. (This ignores the evidence of Lewis (Record, p. 33), who said: "The right hand pump of the engine which pumps water into the boiler was out of order and failed to pump that night. Then the engine got hot and failed to pop off, causing it to explode. One

minute before the explosion the register showed 150 lbs. The pop valve was out of order."

Also evidence of Elliott (record p-30), Burnett (record p-34-5), Krog (record pp-35-6), and Postelle (record p-37), that the pop valve was "stuck" and failed to allow the steam to escape properly. Though defendant in error then and now contends that the defect in the casting was doubtless the principal cause of the explosion.

"This casting, when the engine was completed and delivered to the defendant, was covered by several casings which are usual parts of such an engine and which completely concealed the defect.

"It appears also it was in part, if not entirely, concealed, even if these casings or coverings had been removed by the lap of the boiler plates, and there is evidence showing that it could not have been seen even if the casings had been removed (see evidence of Gibbs, master mechanic of the plaintiff in error, record p. 41). There is nothing to have prevented us from discovering the cold shot line if we had taken off the casings." Evidence of Finnegan (record p-36-40). "So far as the evidence discloses no indications of the existence of this defect had ever appeared. It was a latent defect, and, in my opinion, it has not been established by sufficient evidence that it could have been discovered by the defendent by the exercise or ordinary and reasonable care and diligence, such as the law would require under the circumstances of this case I do not think, therefore, that the defendant has been shown to have been guilty of negligence in procuring, in the first instance, or of having in its use and upon its premises the engine in question." Now, that this flaw or crack in the dome ring was patent to the eye at a glance in looking at the ring itself, both the witnesses for the plaintiff and defendant in error unquestionably agree. See evidence of Eaton (record p. 37), Peacock (record p. 39), Finnegan (record p. 40), the latter testifying that there was, in his opinion, not only a "cold shot line" but an open crack, in the ring; Gibbs, master mechanic (record p. 42), says: "I never saw a piece of ma-

chinery like this before. The defects in the castings of this piece are very unusual. There is an entire absence of any unity in the place where twenty-four rivet holes are drilled. There are also a number of defects known as blow holes or honey comb. From a close inspection, a continuous line could be discovered where the casting failed to unite, and it looks to me that as if the machinist who turned the ring at the lathe or boring machine and the one who drilled the holes could have discovered the flaws."

I deem it superflus to further quote the rejected requests; even a cursory examination of the evidence will show the propriety of the courts action in the premises. It being demonstrated that the defect in the ring was visual, patent, can it be seriously contended, that the facts and circumstances, as disclosed by the record, were such as to justify the conclusion in the breast of the court, that the defendant railroad company, could not by the exercise of proper diligence, have discovered said defect?

As stated, *supra*, to justify a direction by the court to the jury to find a verdict for the defendant there must not have been *any* evidence upon which the jury could reasonably have found a verdict.

The requests were rightfully refused, if there was evidence upon the subject of the railroad company's negligence, proper to be left to the consideration of the jury.

In this connection it is proper to call the attention of the court to the fact that aside from the general law on the subject of presumptions of negligence arising in such cases against a railroad company and of the doctrine of *res ipsa loquitur*, the Code of Georgia specially declares that such presumptions exist. *Section 3033* is as follows: "A railroad company shall be liable for any damage done to persons, stock, or other property, by the running of the locomotives, or cars, or other machinery of such company, or for damage done by any person in the employ of such com-

pany, unless the company shall make it appear that their agents have exercised all ordinary and reasonable care and diligence, the presumption in all cases being against the company."

Code, *Section 2067*: "A carrier of passengers is bound also to extraordinary diligence in behalf of himself and his agents, to protect the lives and persons of his passengers. But he is not liable for injuries to the person, after having used such diligence."

If the evidence offered conduced in any reasonable degree to show such negligence, it should go to the jury. Home Insurance Co., *vs.* Weide, 11 Wall. 438.

"A case, which fairly depends upon the effect or weight of testimony, should not be withdrawn from the jury, unless the testimony be of such a conclusive character as to compel the court, in the exercise of a sound judicial discretion, to set aside a verdict in opposition to it."

Phœnix Insurance Co., *vs.* Doster, 106 U. S. 30. The court cannot be called upon, when a case is before a jury, to decide on the nature and effect of the whole evidence introduced in support of the plaintiff's case, part of which is of a presumptive nature.

Crane *vs.* Morris, 6 Pet. 598.

Burdell *vs.* Denig, 92 U. S. 716.

Surely there was sufficient evidence to authorize, nay, require a submission of the same to the jury. A close examination thereof will show that the evidence deduced demanded a verdict for the plaintiff. A defect cannot, in the very nature of things, be deemed "latent" when the same is discoverable by the exercise of proper diligence.

The defect in the dome ring was discoverable, aside from the tests which the railroad company should have made, as heretofore contended, by simply removing the valve, etc., and examining the interior of the ring.

That this could have been readily done, and discovered, the company's own witnesses testified. M. B. Collier (re-

cord p. 63) says: "It could have been seen if the throttle and all the pipes inside the dome had been taken out so as to allow one to get in". . . . "The dome cap and throttle valve could be easily removed."

To the same effect will be found the evidence of nearly all the witnesses who testified on the subject.

In concluding this argument I deem it proper to discuss another question having an important bearing upon the case. It will be seen from a study of the court, that it failed to instruct the jury concerning the company's liability or the default or negligence of the Baldwin Locomotive Works, the manufacturers and venders, on said engine. The court did nothing more in this connection (rec pp. 69 and 70) than to charge that while the fact that the defendant company purchased the engine from manufacturers of good standing was a circumstance proper for the consideration of the jury, yet that alone could not protect them, or absolve them from the affirmative duty of exercising "due care and diligence on its part in making such inspection and examination of the engine as the safety of persons who are to come near and in contact with it would require, under all the circumstances of the case."

That the Court stopped there, and failed to charge further that the defendant company would be chargeable for the neglect of the manufacturer, or for such defects which could have been readily discovered by the manufacturer during the construction of the engine or parts, cannot be complained of by the plaintiff in error.

Indeed, happily for the defendant in error, there was abundant evidence to support the verdict rendered, without the necessity of making, strenuously, such contention—evidence to show gross neglect on the part of plaintiff in error, after it came in possession of the engine, and irrespective of the default of the manufacturer. And what is here said on this latter subject is merely for the purpose of showing, incidentally, that the Court might very well have held the plaintiff in error to a much stricter accountability, and as submitting an additional reason why the judgment of the lower court should stand affirmed,

As the records now stands, it is doubtful if that question properly enters into the case, or whether this Honorable Court will feel called upon either to discuss or decide the law bearing upon this point.

In the first place, it may be safely asserted, that nearly all of the evidence in the record shows the very grossest degree of neglect on the part of the makers of the engine.

The default in the dome ring could scarcely have failed to escape the glances of any one of the half dozen operatives who worked upon the same. The evidence also warranted the presumption that the water pressure test of 180 pounds was never, in fact, made, as testified by Phillipps, (Record p. 25). The riveter, Heenen (Record p. 24), testified that though the defect could have been discovered by "pounding," that he did not pound the ring, merely "looked over it."

In the discussion of the question of the plaintiff in errors, liability for the default or neglect of the manufacturers, it may become necessary to ascertain the legal relation in which the defendant in error stood to the plaintiff in error, to ascertain the degree of diligence which it owed him. As stated previously, Elliott was in yards of the defendant company in the employ of another company, using the track and yard of the former company under some contractual relation, and, presumably, compensating the defendant for such joint use, pecuniarily or otherwise.

Patterson's Ry. Acc. Law, Sec. 207, places "servants of another railway, while upon the line or premises of the railway in the performance of their duty to that other railway," in the same category of passengers, and "entitled to demand of the railway a like measure of duty."

"The same rule is applied in cases of injuries to the servants of another railway, while upon the line of premises of the defendant in the performance of their duty to that other railway." . . . "The result of the authorities is, that

where a line or a station is in the joint occupancy of two or more companies, the servants of each company are not servants of the other company, nor fellow servants of such other companies, but their right of recovery, in case of injury caused by negligence on the part of those other companies, either in an original defective construction of their lines, as in *Graham's* case, or in a failure to maintain the line in an adequate condition of repair, as in *Snow's* case, or in the carelessness of their servants, as in *Vose's*, *Armstrong's*, *Warburton's* and *Brown's* cases, is that not of a servant, but of a passenger. In this class of cases the injured persons are more than mere licensees. The relation between the railway whom they serve and the other railway, by whose negligence they are injured, is so far founded upon a valuable consideration that it raises upon the part of that other railway implied obligation that it will not be negligent as against those servants."

Ibid Sec. 228. Thomp. Neg. vol. I, p-461. Pierce on R. R. p-274-6.

"Railroads owe to travelers on the highways, or at point contiguous to its lines, where they are lawfully, a *high* degree of diligence." Ibid., Secs. 142 and 145.

That a railroad company is liable for the neglect of the manufacturers for such defects in the construction of machinery, which were discoverable by ordinary care on the part of the manufacturers, seems to be no longer an open question in this country. Mr. Wood in his learned treatise on railways, says: "In this country, except in Michigan and Tennessee, it is, so far as the question has been decided, undoubtedly the rule that a railroad company is responsible for defects in vehicles, etc., which might have been discovered in the process of manufacture, by the application of known tests, but which are not discoverable by any examination which the company could reasonably make afterwards.

"So, too, there is great force in the argument that if a railway company sees fit, either upon grounds of economy or otherwise, to purchase its cars and appliances in the market instead of manufacturing them itself, it must be regarded as taking the risk of any defects therein which could have been discovered by it by the application of known and usual tests, if it had manufactured them itself, and that the diligence of the manufacturers cannot be substituted for the diligence of the carriers.

"There can be no injustice in making these companies respond in damages for injuries resulting from such defects, especially as they have it in their power to provide by contract for their own indemnity against consequences of any insufficiency in that respect. This rule imposes a high degree of care and vigilance upon railway companies, but it does not impose upon them a greater burden in this respect than public policy, in view of the nature of the business, demands, nor is it unreasonable or unjust either to the companies or the public.

"It would be impracticable and disastrous to permit any relaxation of vigilance on the part of these companies by permitting them, by purchasing their appliances, to shield themselves from the consequences of defects therein by saying, 'I bought the defective machinery of a reputable manufacturer, and he and not myself is the party to be blamed.'"

2 Wood Ry. Law, pp. 1100-2.

Ibid., pp. 1092 and 1064 and note citing authorities.

Perhaps the leading case in this country is the case of *Hegeman vs. Ry. Co.* 13 N. Y. 26. (S. C.) 16 Barb. 356.

This case is discussed at length in the recent learned treatise "Negligence of Imposed Duties" (passenger carriers), Ray, p. 313, just issued (1893), and approved by the author, and many other like cases are commented upon. See also pp. 310, 311, 312, 314 and 57. Quoting from the Hegeman

case we find: "They (the defendants) gave evidence to show that they had purchased the car from a manufacturer of high reputation for the excellence and safety of the cars manufactured by him, and that after employing all reasonable care and skill for the purpose of detecting any defect in the machinery, the defect in the axle, which was the cause of the accident, had remained undiscovered, and in fact could not be discovered by means of any examination which the defendants were able to make. The rule of law applied to the evidence upon this branch of the case was very accurately stated by the learned Judge at the circuit.

After having distinctly laid down the general proposition that the defendants were not liable if they exercised all reasonable care and diligence . . . . he proceeded to say in respect to the defect in the axle, that the defendants were responsible for this defect to the same extent as if the axle had been manufactured by themselves. Of the soundness of this rule there can be no doubt . . . "Whether the engine or car which they place upon the road for the purpose of carrying passengers has been manufactured in their own shops by agents employed directly for that purpose, or by a manufacturer engaged in the business of supplying such articles for sale, they are alike bound to see that in the construction no care or skill has been omitted for the purpose of making such engine or car as safe as care and skill can make it."

To the same effect will be found the following authorities: Rover on Railroads, Vol. 2. p. 954.

Pierce on Railroads, p. 372. Patterson Ry. Acc. Law secs. 238-9-40. 26 N. Y. 102. 11 Pick 106, 9 Bing 331, 9 Watts & S. 32, and other authorities "too numerous to mention." That the Plaintiff in Error defended this case principally upon the mistaken assumption that it could rely upon the reputation of its manufacturer appears from the evidence of C. F. Thomas, Master Mechanic, (record

p. 61.) who testified: "I speak of the customs of railroads generally not to examine the boilers and castings of locomotives from my knowledge of the railroads with which I have been engaged. Officially, this is all I know as to the custom, but from my intercourse with the roads I take it to be general custom to rely upon the manufacturers." To the same effect is the evidence of Gibbs, (record p. 41.)

CONCLUSION.

In conclusion, I beg to suggest, that not only should the judgment of the Circuit Court be affirmed, but from the absence of any meritorious assignments of error, this writ of error, it would seem, was sued out solely for the purpose of delay, and this Honorable Court is hereby asked to assess such damages for such litigious suing out of such writ, as to the Court may seem just and proper in the premises.

C. T. Ladson,
Attorney for Defendant in Error.

149 U.S. 266

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CLERK.

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1892.

No. 199.

THE RICHMOND AND DANVILLE RAILROAD COMPANY, PLAINTIFF IN ERROR,

vs.

HENRY ELLIOTT, DEFENDANT IN ERROR.

Additional Brief for Defendant in Error.

FIRST AND THIRD ASSIGNMENTS OF ERROR.

Continuing the discussion of the *first* and *third* assignments (pp. 6–11 brief), it will be observed that the declaration specially claimed "a good prospect" of increase of wages. "He says his injuries are permanent," etc., "and did earn $50 per month, with a good prospect of being able to earn $100 per month in the near future". (Rec., 2.) Again: Even if the evidence is subject to the criticism of being "speculative," as claimed, yet no harm resulted therefrom, for whatever of infirmity it bore in that regard was as patent to the jury as to court or counsel. No false or strained argument or conclusion was urged by the witness. He simply testified that he had long served in the

lower grade (coupler); that he understood and had discharged the duties of the next grade (conductor), and that "there is a system by which you go in there as coupler or train hand, or in the yard, and if a man falls out you stand a chance of taking his place."

The witness *Burnett, Elliott's* conductor, testified without objection (Rec., 34):

"Elliott I have known for 10 years. He was the first man who ever coupled cars for me and was a more experienced railroad man than I was. He was faithful to his duty, and I could trust him with my own duty when I wished to go down town."

And the same witness' evidence, the subject of third assignment, is:

"The next step from where he was at the time he got hurt would have been to have had charge of an engine, what we call a yard conductor."

The promotion here is not adventitious in the objectionable light of the *Allison* case (86 Ga., 145), seemingly relied on by adversary counsel, a mail clerk, whose office, the proof showed, was controlled "by political considerations," or the 7 *Allen*, 709, case, where the plaintiff had simply applied for a position, which, probably, was purely temporary and there was no evidence of his fitness to discharge the duties thereof, or that he could have secured same, even had he not been injured.

Elliott's contemplated promotion, which seemed so likely, almost certain to occur, partook more *of a settled vocation* (as conductor) *for life*, in the sense of an apprentice learning his trade.

As heretofore contended, the jury could not have been misled, or have given the evidence any other weight than the somewhat uncertain import which it, upon its face, engendered, without the restrictions thrown around it by the

court in its admission, and in the charge; but, emasculated as it were by such limitations, the evidence is absolutely unobjectionable. (See examination of witness and colloquy between the court and company's counsel, Rec., 31.) This colloquy, of course, took place in the presence of jury. They understood the evidence was in before them only in a *qualified* sense; that same was suspended by the court and was only to be considered by them in connection with such instructions as the court might give; hence, down to the very moment of receiving said charge, the evidence could not have been considered by them.

If the evidence was infirm by reason of uncertainty or conjecture, such infirmity was apparent on its face, and the court specially instructed the jury that they "ought not to be governed *by a mere possibility or conjecture* in a matter of that sort; it ought to be *shown to the reasonable satisfaction* of the jury that the man after awhile would earn more money than he was then earning." Therefore, whatever conjecture was in the evidence was, in its incipiency, rendered nugatory by the court.

But, in principle and authority, *was* the evidence in anywise inadmissible?

Mr Field, in his learned work on *Damages*, reminds us that while it is generally true that courts are interpreters and expounders of the law *as it is*, yet that a study of *damage-suit law* "must satisfy the enquirer that much of it has its origin, practically, in judicial decisions which declare not always so much *what the law is* as *what it ought to be and shall be.*" He characterizes it as "modern common law." This law is peculiarly *evolutionary*. It will be remembered that only until a comparatively recent period (under Lord Campbell's act, in 1846, in England and much later in most of our States) could a child recover damages for the grossly negligent homicide of its parent, upon whom he or she was dependent for nurture and support; and a famous English judge not many years ago declared from the bench, that

while he had to admit a plaintiff's *legal* right to recover damages for bodily pain, yet, where same was negligently but *unintentionally* inflicted, his opinion was that the preferment of such claim was unmanly!

This law is assuming vast importance. The wonderful strides made in railroad building in recent years, which is but an earnest of the demands of the civilization of the near future, coupled with the manifold dangers of travel and railroad employment—betokened by recent governmental statistics, which show about 25,000 people are killed and wounded yearly, equaling in number our standing army—must elicit, both in the interests of railroads and people, the broadest wisdom of legislatures and courts.

A brief reference is here made to some of the authorities. The case of *Howard* vs. *Davis*, 76 Tex., 634, is almost exactly in point with case at bar. There the plaintiff was acting temporarily as engineer of an engine which exploded.

"The court permitted the plaintiff to testify that he was not a skilled engineer; was acting as engineer at the time of the accident; was receiving $56 per month for his services; was educating himself in the business, and intended to be an engineer," etc.

Ruling below affirmed.

In another case it was *held:*

"One of the questions to be determined by the jury was as to the pecuniary relations sustained by Nelson in regard to his prospective estate. * * * A young man, for instance, is killed who has never earned anything and was not qualified to earn much, but whose talents and qualifications were such that his prospects of earning money were large. We cannot say that he has sustained no injury with reference to his prospective estate, and yet the extent of his injury is by necessity largely a matter of conjecture."

Simonson *vs.* R. R., 49 Ia., 90.

"The amount of recovery is not necessarily based on the plaintiff's earnings at the time of the injury. Thus, an unskilled engineer who was learning his trade may recover compensation, based on the probable skill he would have acquired if the defendant had not put it out of his power to attend to his work, and one not engaged in business at the time of the injury may recover compensation for being prevented in future from engaging in business in which he might reasonably expect success, though he was not entirely certain of it."

1 Sedg. Dam., sec. 180.

And in the succeeding section (§ 181), same author, after discussing various cases, says:

"The principle here intimated, that a plaintiff should not necessarily recover as the value of his time what it had been worth in the past, is established."

And this Court has adjudged that—

"The damages must depend upon the facts and circumstances of each particular case, and the result must be left mainly to the sound sense and deliberate judgment of the jury."

R. R. *vs.* Barron, 5 Wall., 90.

There is much justice, too, in the distinction made thus:

"While the burden of proof of damages rests in a general sense upon the plaintiff, yet if through no fault of his the precise damage sustained cannot be accurately determined, the wrongdoer must bear the burden of the difficulty."

(*Shearman & Red. Neg.*, § 740.)

And while in principle and on authority, a wide distinction prevails as to allowance of prospective profits between injuries arising by breach of contract, and injuries flowing from a tort, the rule being much broader in the latter class, which distinction the adversary counsel seem to ignore in

citing 19 *Ga.*, 416, and kindred cases, yet there is abundance of authority sustaining allowance of such profits when they would to a "reasonable certainty" have been earned.

Ibid, § 744.

As to suits for homicide of children too young to earn money, whose future capacity or qualifications in that regard were wholly problematical, see 11 *Abbott* (*New Cases*), (*N. Y.*, 72), and 9 *Heisk.*, 20. In the latter case a recovery of $3,000 was sustained for homicide of an infant eighteen months old. In the case of *Wade* vs. *Leroy* (20 How., 43) plaintiff was allowed to prove, to show extent of his injuries that "the particular business in which he was engaged was that of a distiller and manufacturer of turpentine and that he was largely engaged in that business."

See also 3 Suth. Dam., 261 and 716.

And that courts, in the very nature of things, are compelled to rely upon the sound judgment of juries finds expression in the opinion of Lord C. J. Coleridge in the leading English cases of *Philipps* vs. *S. W. R'y*, 4 Q. B. D., 406, where a verdict for 16,000 pounds was sustained (the plaintiff being a physician):

"I apprehend that both these propositions are correct, and the reason why this general mode of leaving the question to the jury is right is that human ingenuity has not been able to devise a more correct proposition, and that if the judge tries to make a perfect proposition he either states something which is wrong or omits to state something which ought to be stated."

See also a class of cases where of necessity great uncertainty is met with in ascertaining damages for homicide or injuries to professional men. The cases of *R. R.* vs. *Barron* (*supra*), *Judge*; *Clergyman*, 35 Fed. Rep., 649; *Actor*, 32 Mich., 77; *Dentist*, 19 Hun., 35; *Lawyer*, 63 Barb., 260.

In conclusion, it may be stated that should this judgment be reversed it must appear to this honorable Court, upon even a cursory examination of the evidence sent up in the record, if for that purpose it may examine the facts, that another trial would almost inevitably result in another verdict equaling if not exceeding the present verdict; and this Court has held in such cases slight errors (though it is confidently asserted that none exist in this case) will not require a reversal.

Lancaster vs. *Collins*, 115 U. S., 227.

In the case of *Parshall* vs. *R. R. Co.*, 35 Fed. Rep., 651, *opinion* by *Judge Brewer, held:*

"There are two or three other matters in which, perhaps, the trial judge made a mistake." * * *

"For instance, he permitted one witness to testify as to a statement made by the conductor of the M. & St. L. train after the accident." * * *

"In one or two other matters of a similar nature I think a careful examination would satisfy the trial judge, as it has impressed me, with the belief that there was some technical error; but I do not understand that an error of that kind is of itself sufficient to justify a court in setting aside a verdict and putting the parties to the expense and time of another trial if upon all the facts it is clear, these errors being excluded, the same verdict will almost necessarily follow."

C. T. LADSON,
Counsel for Defendant in Error.